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Abstract

Caudill, Rowlett, and Scott, a firm of architects, planners, and engineers, present their method of campus planning for Pima County Junior College. The elements which shape the physical form of PCJC are analyzed and represented by diagrams and sketches. From the analysis of the educational program, the site characteristics, and the budget, the planning precepts were developed which are general rules for orderly campus growth. The final development studies are derived from "The Campus Plan of Ten Precepts" designed specifically for Pima County Junior College. (TC)

PC
JC

PIMA COUNTY JUNIOR COLLEGE

AN APPROACH TO CAMPUS PLANNING

CAUDILL ROWLETT SCOTT INVESTIGATION 15

ASSOCIATED ARCHITECTS FOR THE PROJECT

CAUDILL ROWLETT SCOTT-HOUSTON
FRIEDMAN JOBUSCH WILDE-TUCSON

THE PIMA COUNTY JUNIOR COLLEGE

required considerable time, thought, and energy to determine the space-shaping forces necessary to do the educational task envisioned by the Governing Board and its consultants. As planners we dug deep. We hoped to find educational bases on which to make architectural decisions. Thanks to a good client and good educational consultants, we think we have.

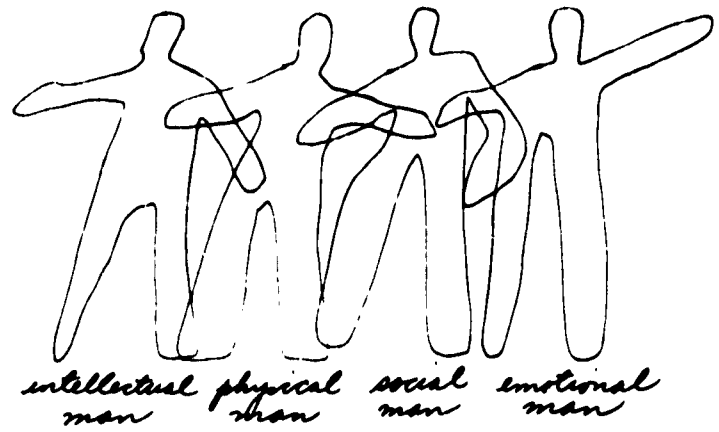
What shapes space? Architectural form gives shape to space. But form -- the walls, the floors, the roofs, and the building mass -- is shaped by many forces. These forces, therefore, directly shape

space. Obviously the site is a strong form-giver. Most emphatically, it is in the case of PC/JC. An even stronger force is education. Experienced designers of space for learning know that education and architecture are inseparable. They know that the campus planner must delve deep into education and bring to the surface distinct, clear thoughts concerning what will happen educationally on the campus because what happens architecturally should mirror what happens educationally. The campus planner must go about his task strongly believing this premise: Architecture and education are one. Therefore, programming a new campus must start with students and their spaces for learning. But what kind of space? The answer to that can't be determined until answers to these questions are obtained: What is the educational philosophy? What are the aims? What are the methods? What is to be learned? With what equipment? And many more such questions.

Form with educational logic grows out of distinct, clear thoughts. In CRS we have a saying that if one wants to think with clarity, he must think with his hands as well as his head. The maxim goes, "Draw a picture of the thought and eliminate the fuzz." The following, therefore, are graphic-thoughts presented sequentially and used by the PC/JC planning team to discover and identify the form-giving forces of the proposed campus.

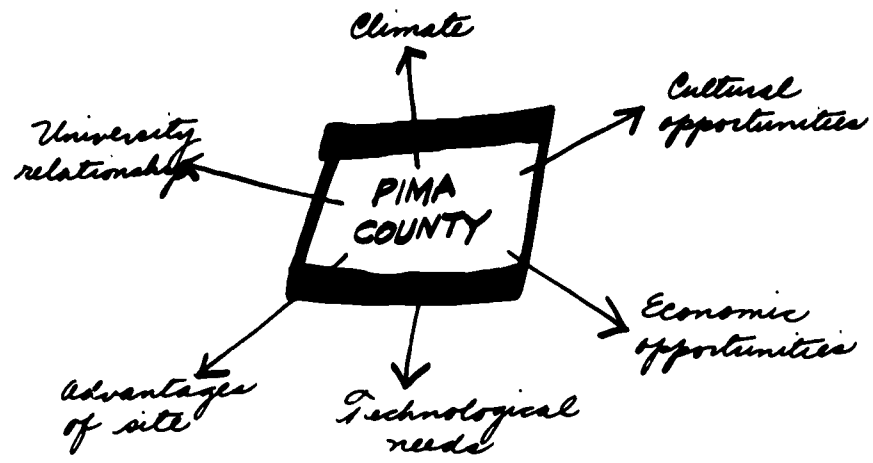
The Pima County Junior College is committed to the TOTAL development - intellectually, physically, socially and emotionally - of each INDIVIDUAL STUDENT

1



We need to discover the uniqueness of PCJC

2



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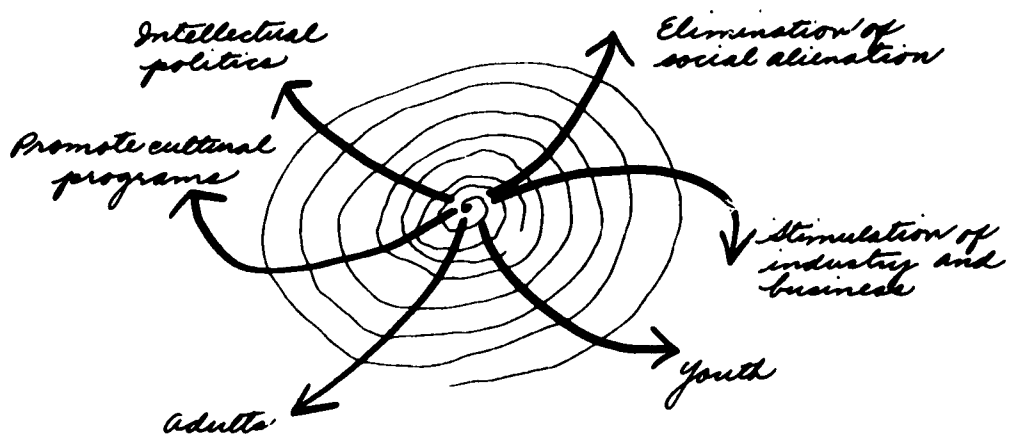
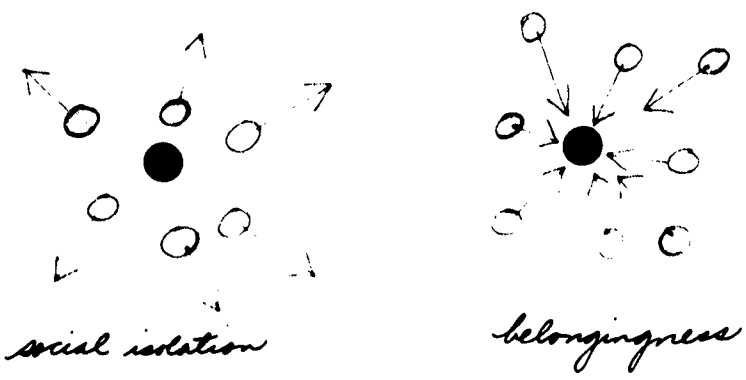


The prime concept of the Community College: It is FOR, OF, and BY THE COMMUNITY. Let the community's own college be a REGENERATIVE FORCE to raise the aspirations for building a better community

4

The junior college student body is the most DIVERSIFIED of any institution, a problem that architecture can help solve.



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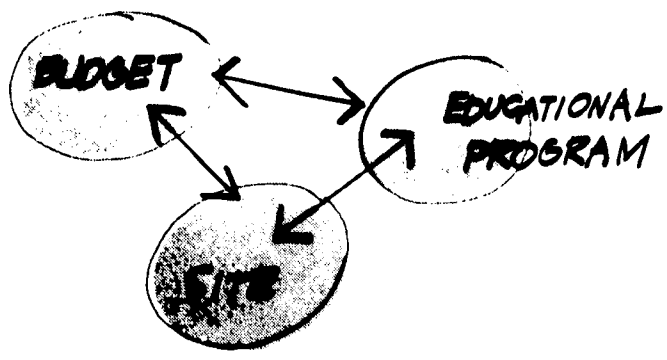
The great RANGE OF STUDENT DIFFERENCES - age, sociological, ethnic, economic, intellectual - requires special attention to the way architecture can help create sociological benefits.



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A valid solution to the planning problem emerges from careful analysis and evaluation of all data relating to these four givens.

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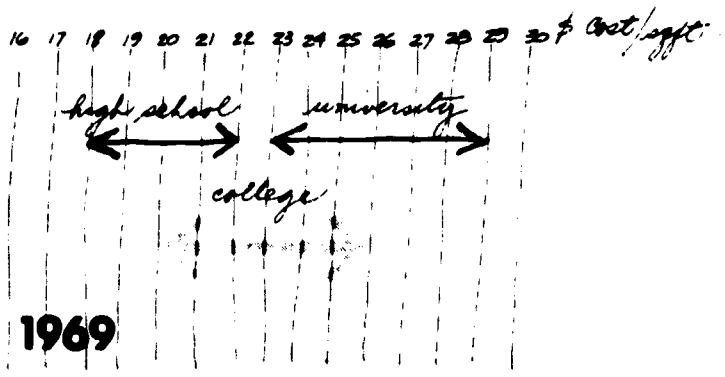
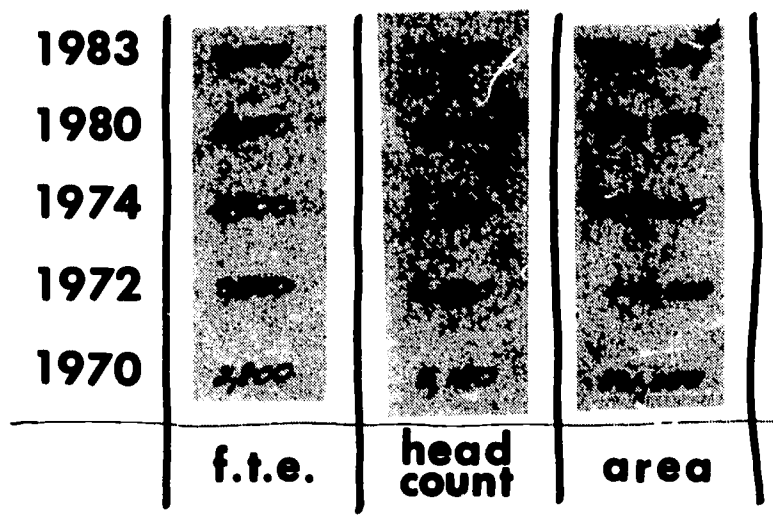


The major reasons why UNIVERSITY buildings cost more than HIGH SCHOOLS are:
(1) high quality construction required
(2) more complex forms
(3) need for inspirational, sophisticated surroundings
Jr. College QUALITY/COST range logically falls between these two.

8



The Campus is planned to grow in 5 PHASES.

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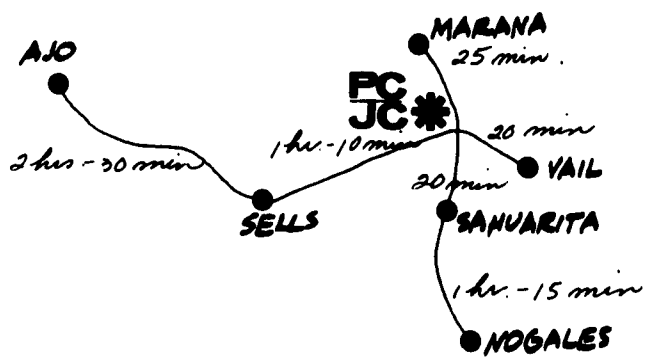
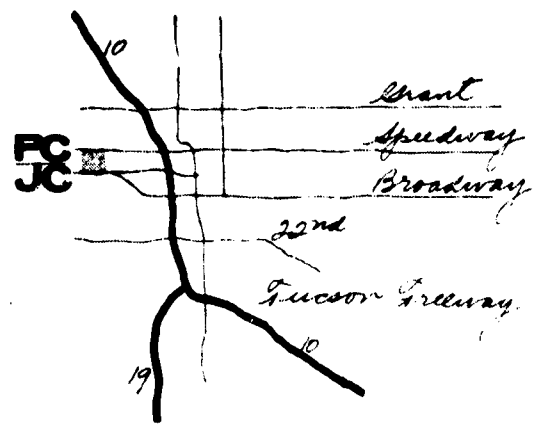


The TIME-DISTANCE study shows that students will be able to commute within a reasonable time, except from western portion of county.



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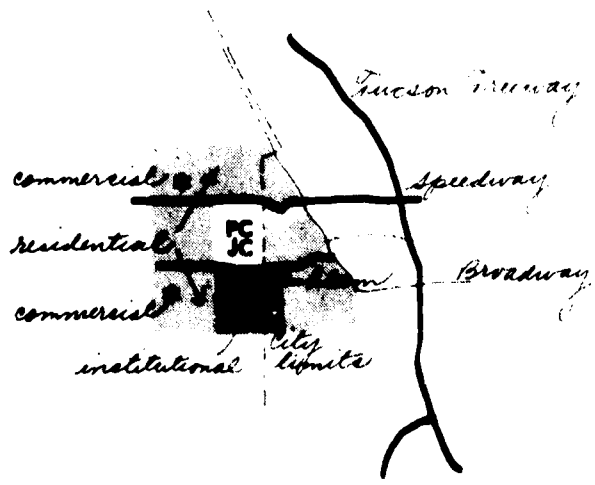
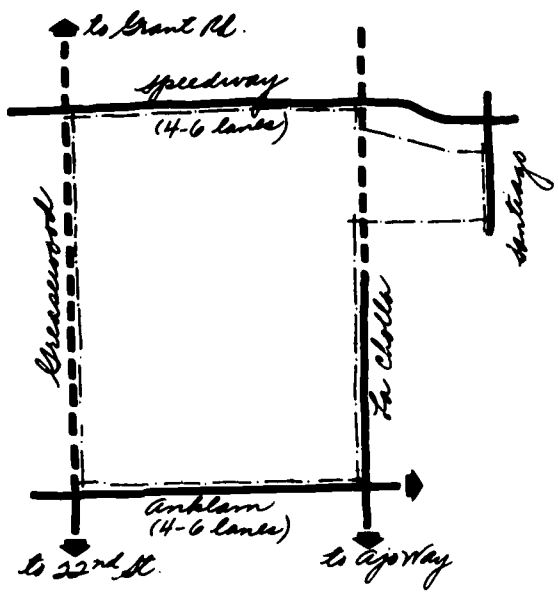
Majority of TRAFFIC to and from the college will occur on these highways and streets.



11

ZONING proposals for adjacent LANDUSE indicate that the site is surrounded by residential zones with minor commercial development.



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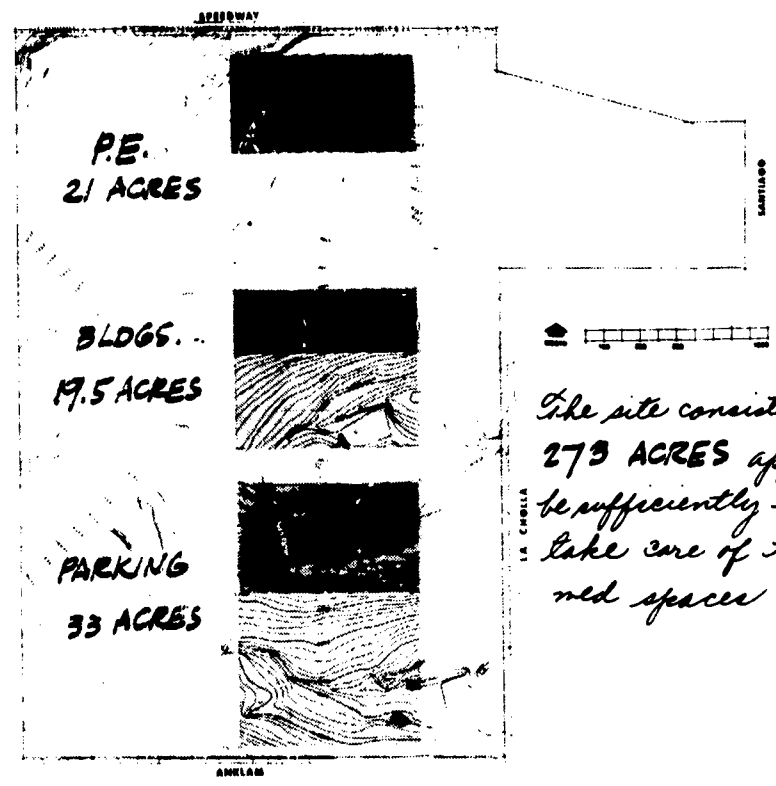
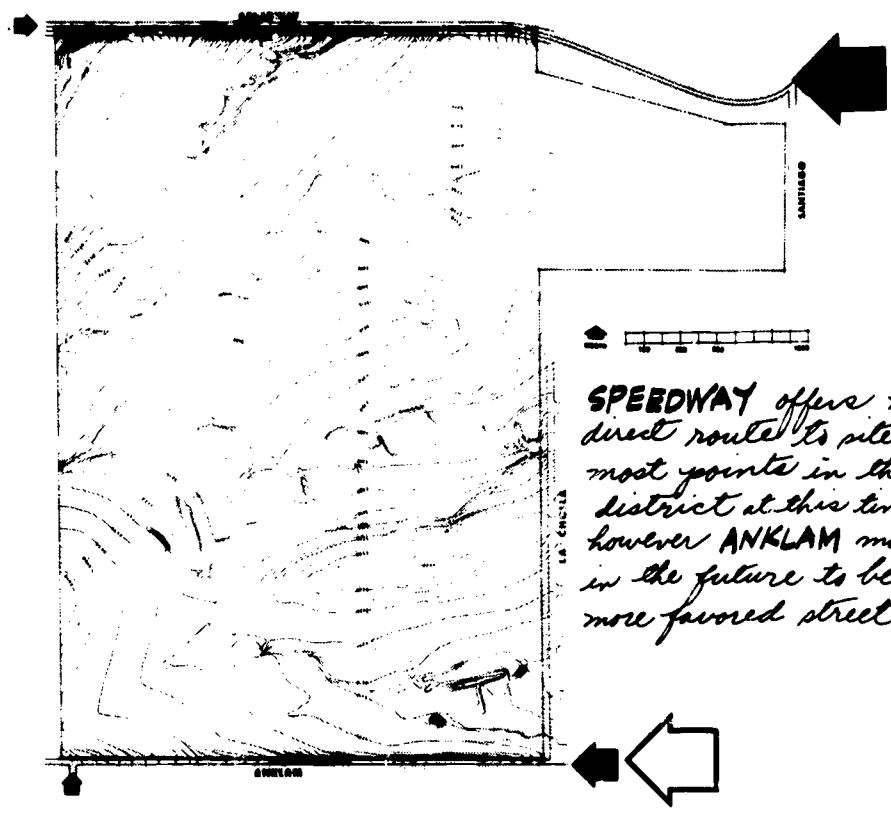
Proposed extensions of LA CHOLLA and GREASEWOOD provide access to 6 different interchanges on FREEWAY at Grant, Speedway, St Mary's, Congress, 22nd and Ajo Way.

13



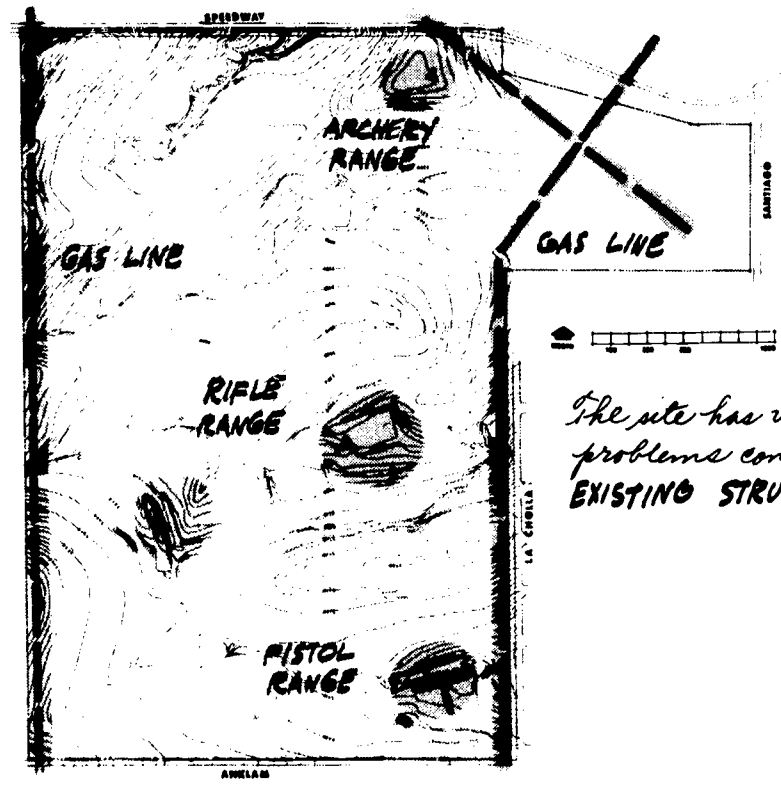
The site consisting of 273 ACRES appears to be sufficiently large to take care of the programmed spaces

14

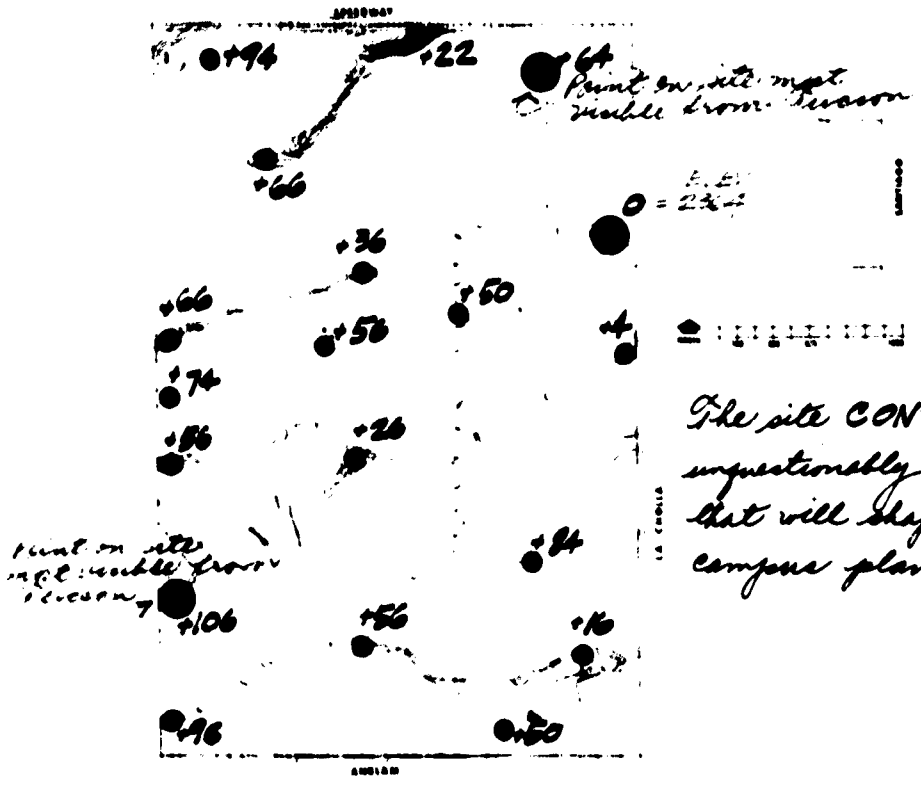


SPEEDWAY offers most direct route to site from most points in the district at this time, however ANKLAM may prove in the future to be a more favored street

15

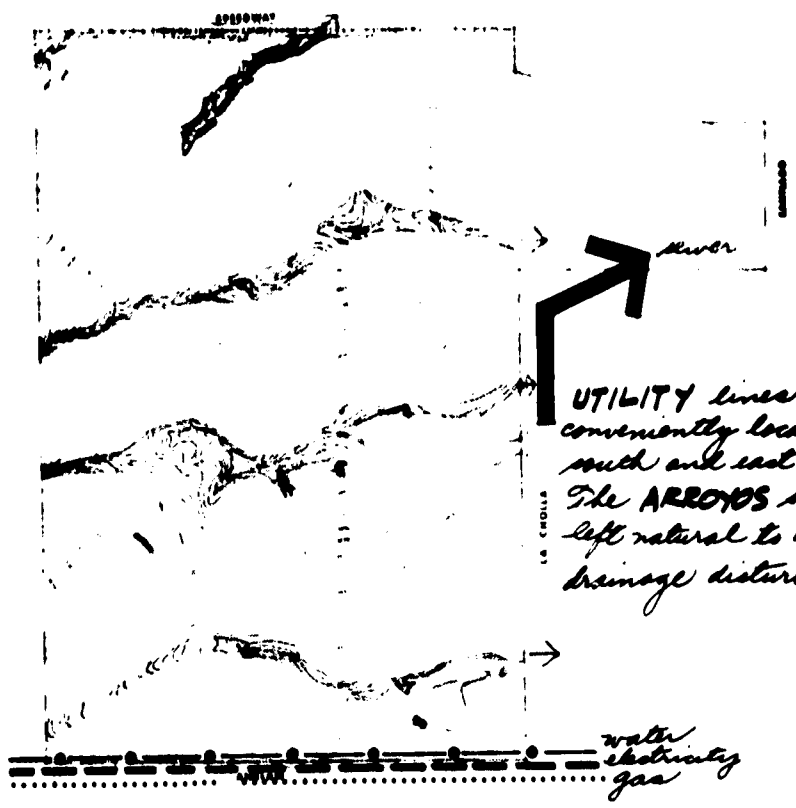


The site has very few problems concerning EXISTING STRUCTURES



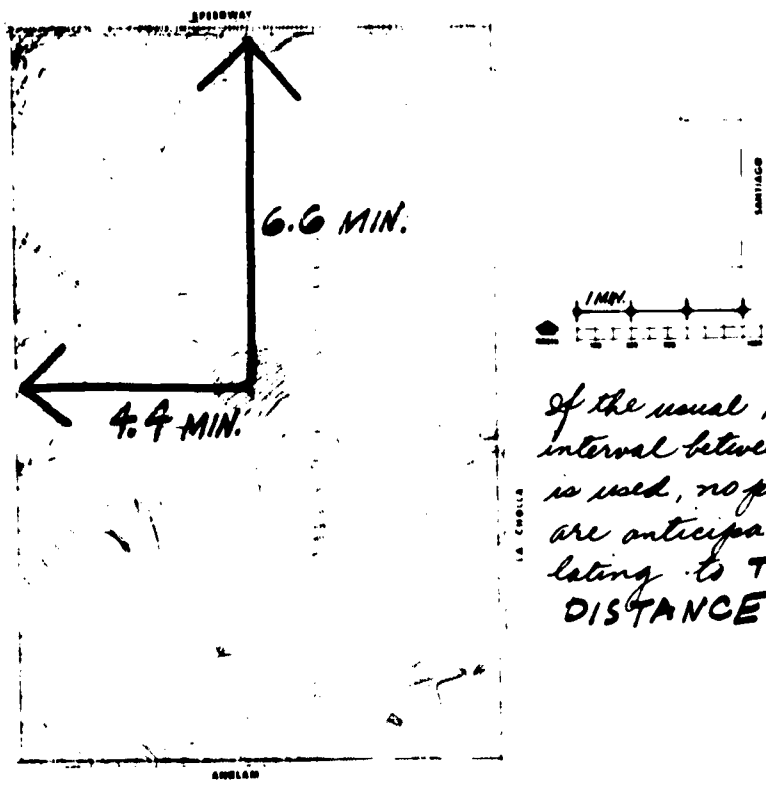
The site CONTOURS unquestionably are forces that will shape the campus plan.

16



UTILITY lines are conveniently located on south and east boundaries The ARROYOS should be left natural to avoid drainage disturbances.

17



If the usual 10 minute interval between classes is used, no problems are anticipated relating to TIME-DISTANCE.

18

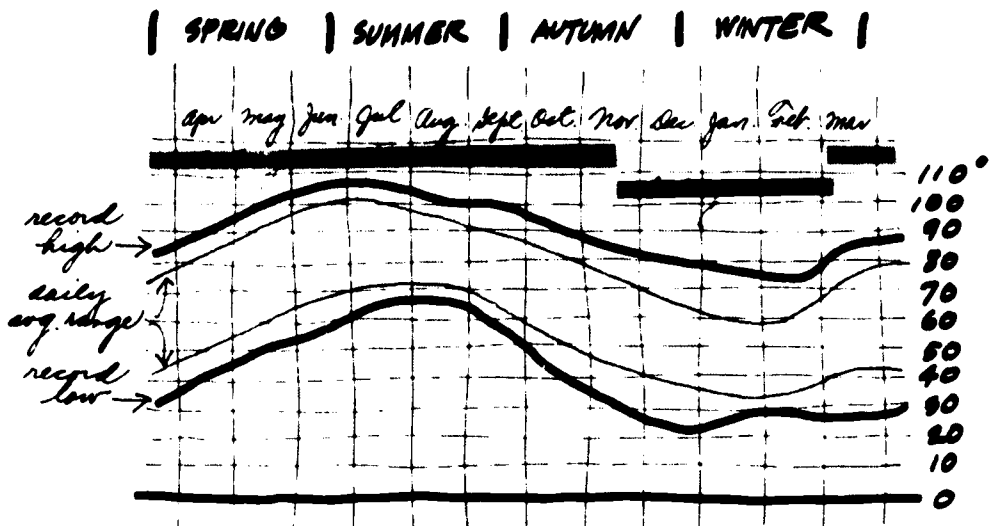
19

Native plants found on the site:
SAGUARO, STAGHORN, OCOTILLO, BUCKHORN,
etc., should be used as landscape elements.

20

There are many PALO VERDE trees on the site.
With water and cultivation they can grow into
beautiful landscape elements for creating an
indigenous environment characteristic of Pima County.

21



Long summers and short mild winters will promote
the use of OUTSIDE AREAS

| SPRING | SUMMER | AUTUMN | WINTER |

APR. MAY JUN. JUL. AUG. SEP. OCT. NOV. DEC. JAN. FEB. MAR

[redacted]

[redacted]

22

The Campus and its buildings should respond to the requirements for a LONG COOLING season and a relatively SHORT HEATING season

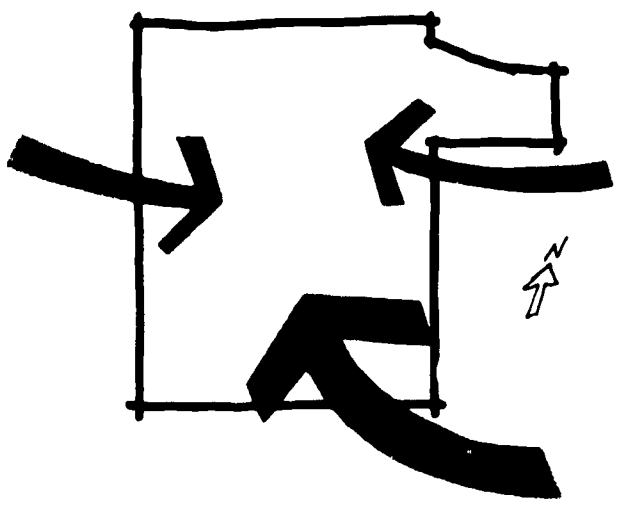
| SPRING | SUMMER | AUTUMN | WINTER |

4
3
2
1
0 inches

23

monthly normal 027 013 029 206 285 100 064 062 092 082 084 053

Out of a yearly normal of 11 00 inches of rain, the months of July and August receive the most PRECIPITATION



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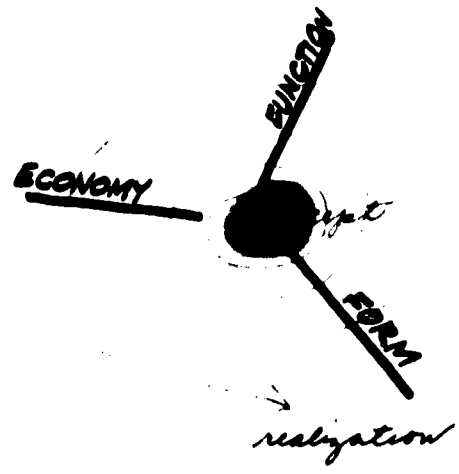
Prevailing WIND direction is from the SOUTHEAST. Intermittant fast winds come from East and West in the winter and East and Southeast in the summer.

25



The DESIGN PROCESS concerns equilibrating function, form and economy – the 3 inseparable factors which shape the Campus.

$18 $26

26

1969

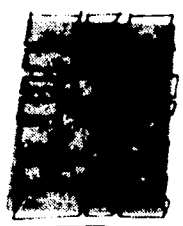
classrooms
gym
offices
shops
labs
library
student union

The RANGE of SQ/FT COST within one Campus varies considerably.

27

Planning a Campus presents a choice: go

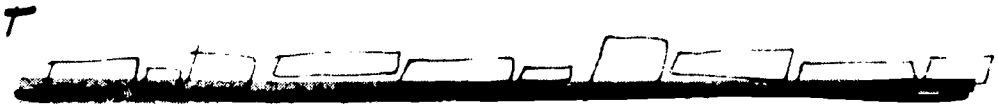
UP



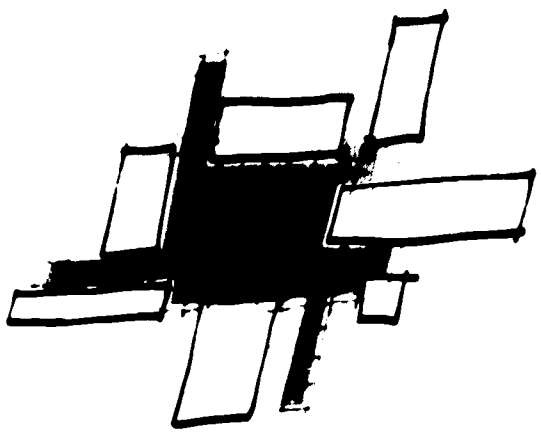
stack the units to form one big block.

or

OUT

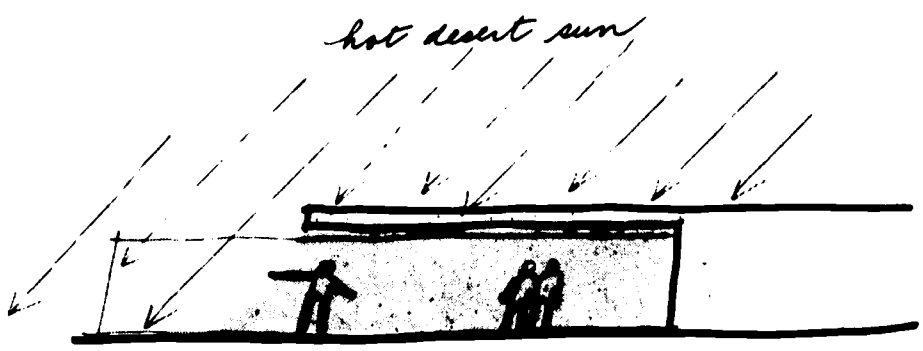


Disperse the units over the site.



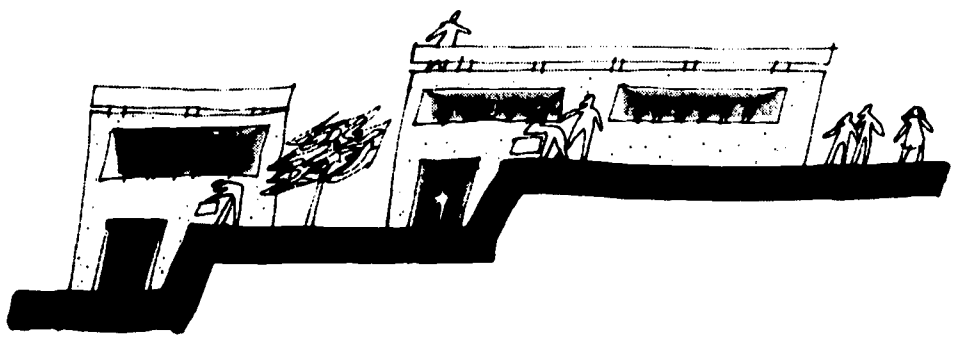
28

Consider leaving the desert site undisturbed (except for parking) with buildings grouped to form an OASIS PATIO of the grand scale.



29

When the hot SUN beats down on the foothills, SHADE through large overhangs, porches and protected terraces is most desirable.



30

The contours of the FOOTHILLS are FORM SHAPERS.

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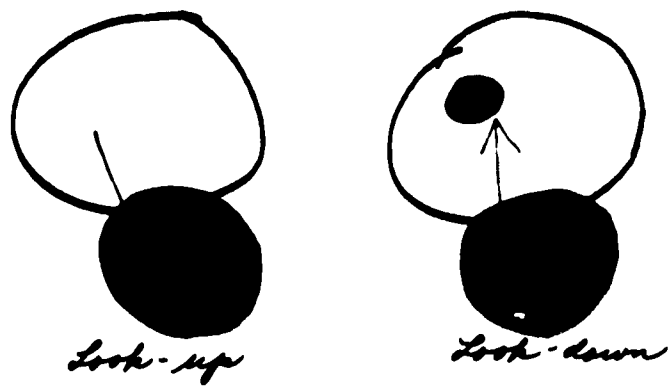
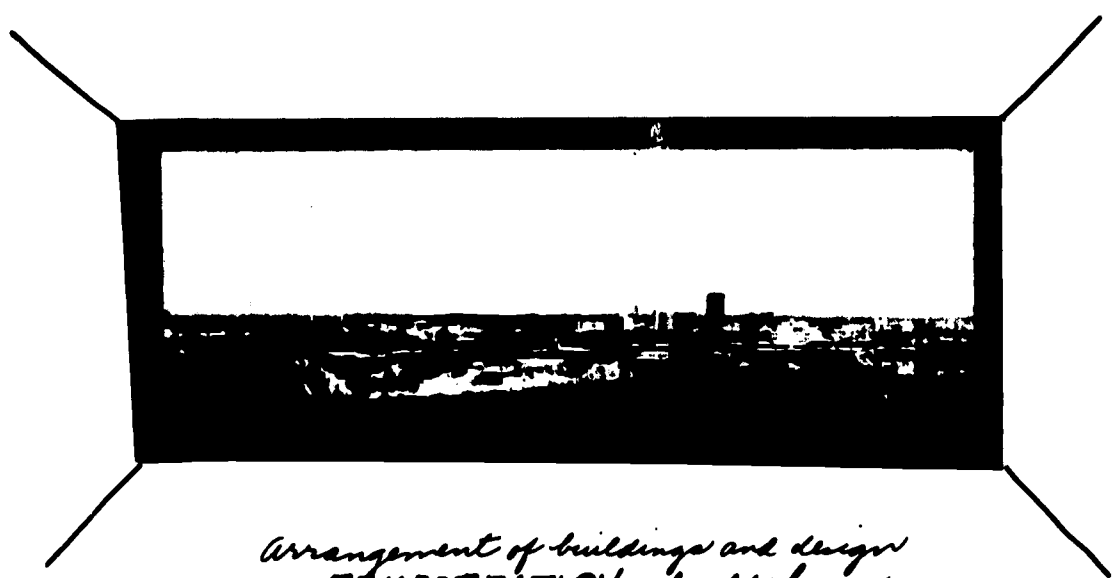


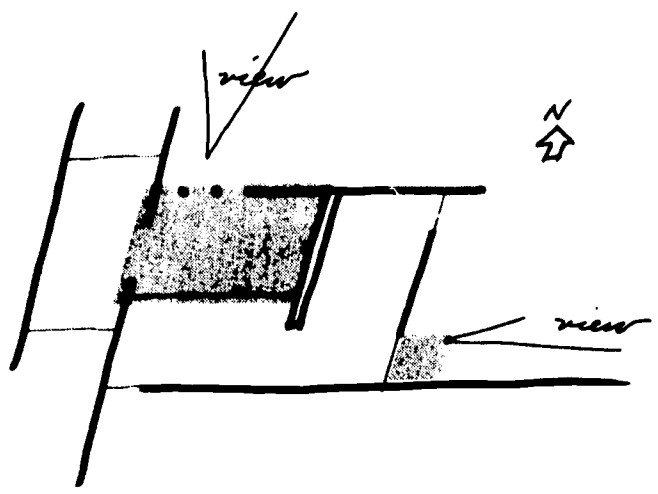
The site is unusual in that it offers TWO WAY VIEWS. Architecture should take full advantage of this uniqueness.

32

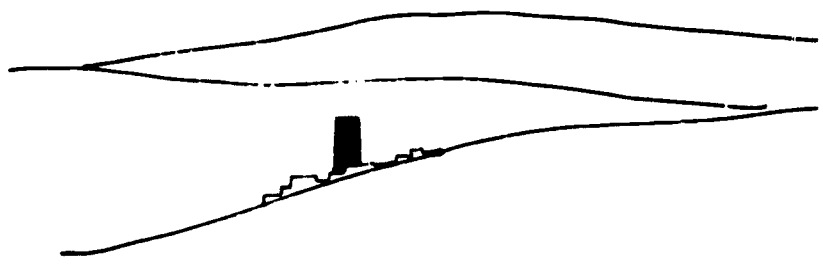


Arrangement of buildings and design of FENESTRATION should honor the magnificent views from the site.

33

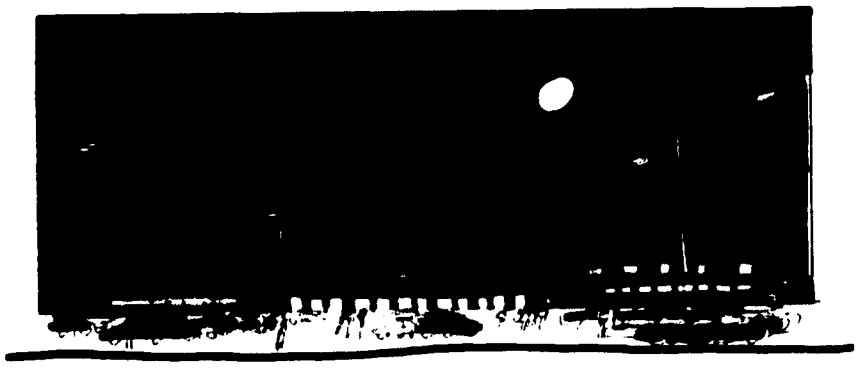


Generally there should be SOLID walls on WEST exposure with window openings on other exposures kept to a minimum. Rationed VIEWS if properly framed and focused are better than glass walls.



34

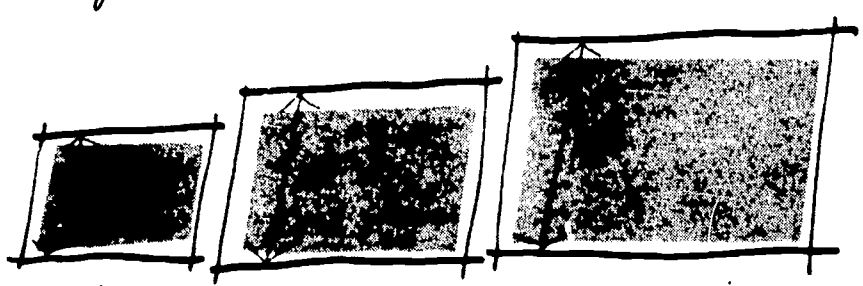
Every Campus needs a SYMBOL. Duke has its chapel. Harvard, the yard. PCC JC needs something to which the man in the street can point and say: "There's our college".



35

The NIGHT CAMPUS must be an alive, exciting, safe place at night - living nocturnal architecture.

Considerations should be given to grouping according to SPACE MODULES to simplify construction and cut cost.



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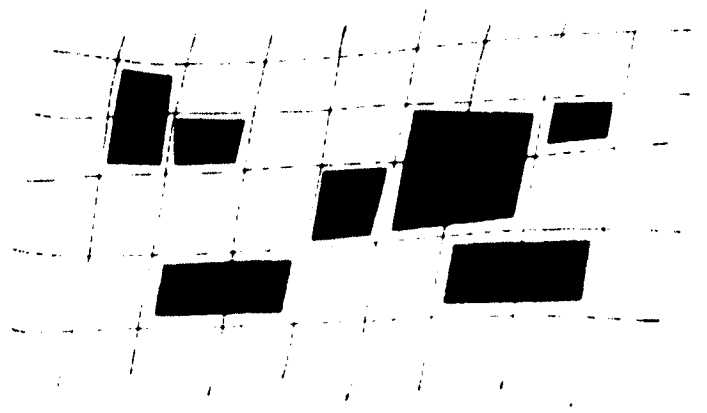
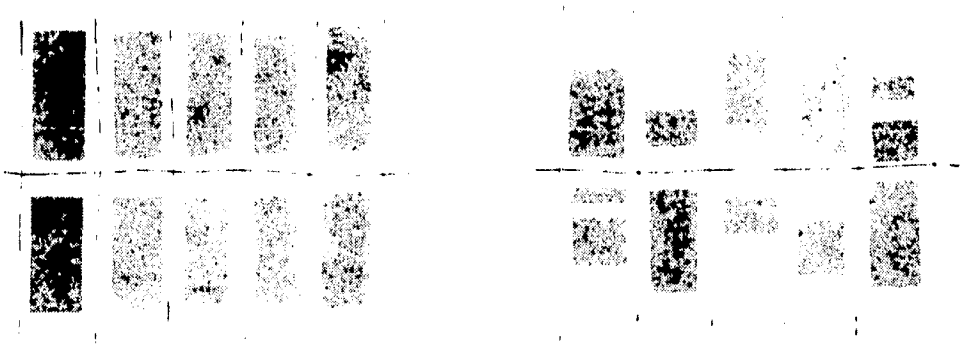


Through the use of a VOLUMETRIC MODULE there will be ARCHITECTURAL ORDER when Campus expansion and building conversion are required.

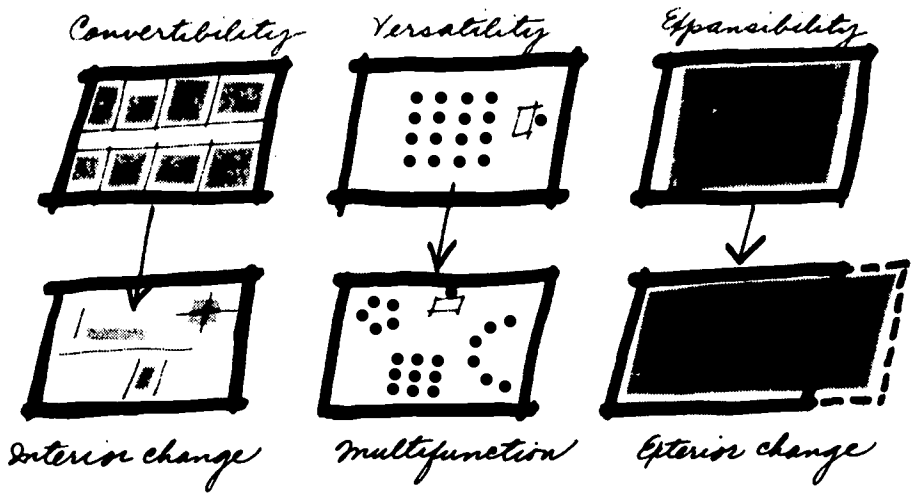
38



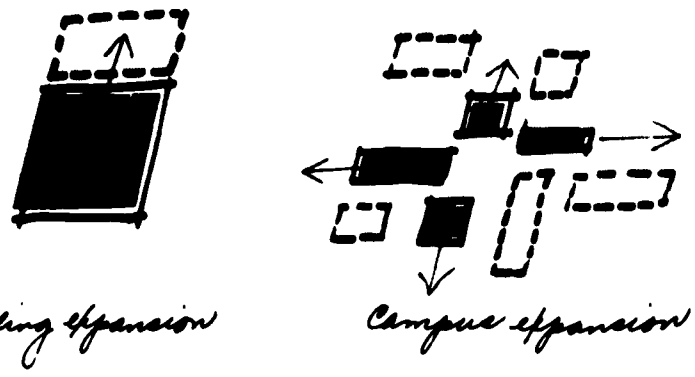
There must be SYSTEMS - structural, mechanical, circulation & aesthetic, to give economy and visual order.

But within these systems, there must be the opportunity for VARIETY to respond to differences of student-professor program requirements.

39



Architectural FLEXIBILITY is vital to the fast moving education front.



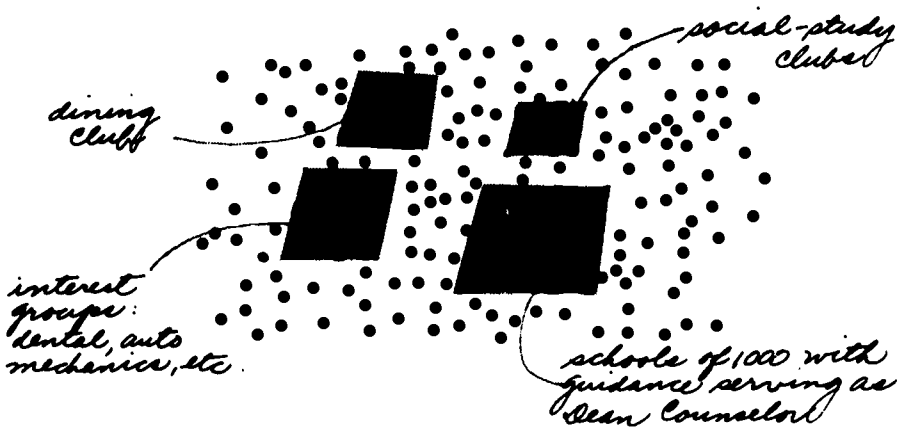
Building expansion Campus expansion

40

The Campus must GROW like a tree - part and whole - There should be VISUAL UNITY at each stage of development.

41

WHERE on Campus can (1) student meet student, (2) professor meet professor, and even more important, (3) student meet professor in an informal atmosphere?



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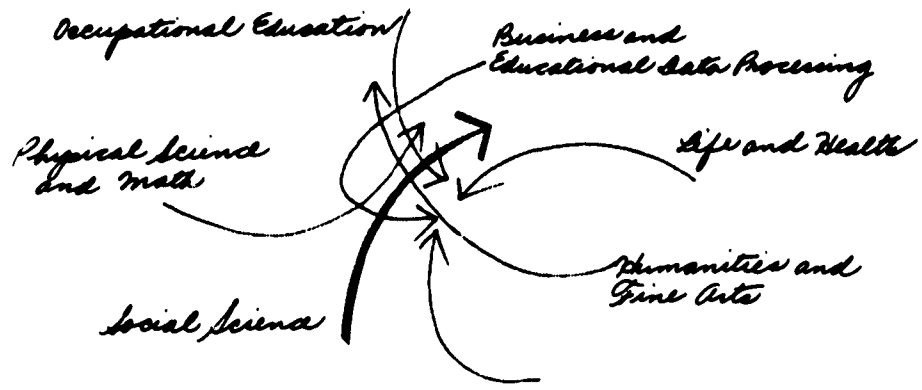
Since ultimate enrollment will be 6000, the student must identify himself with a SMALLER GROUP. What size? What's best EDUCATIONALLY and SOCIOLOGICALLY?

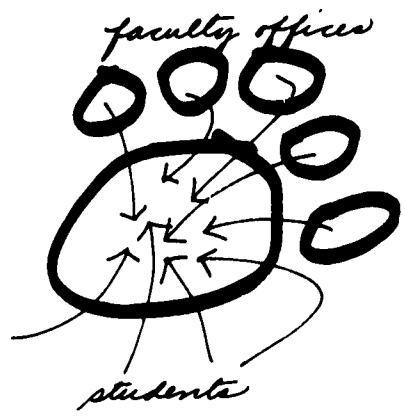
43



When there is INTERDISCIPLINARY MIX providing maximum exposure of a student to academic activities other than his major, intellectual and social benefit is accomplished.

If an educational aim is to foster MIXING of faculty and students, Architecture can help.

44

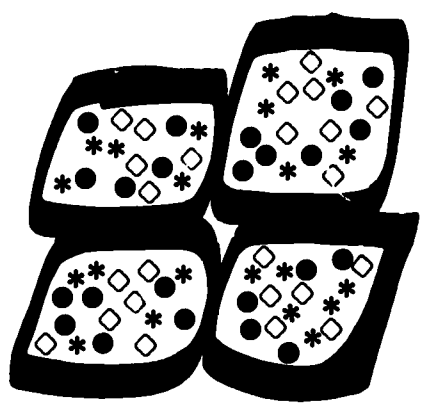


STUDENT CENTER

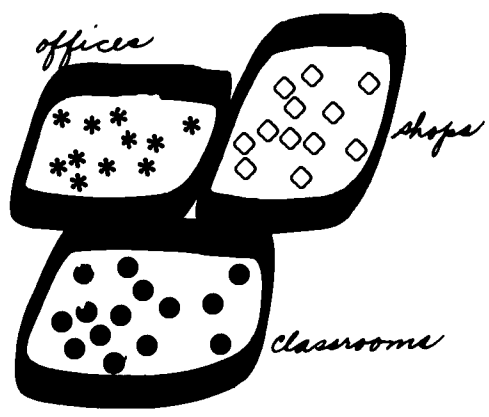
CLASSROOM-LAB BUILDING

Basically there are two ways of GROUPING SPACES:

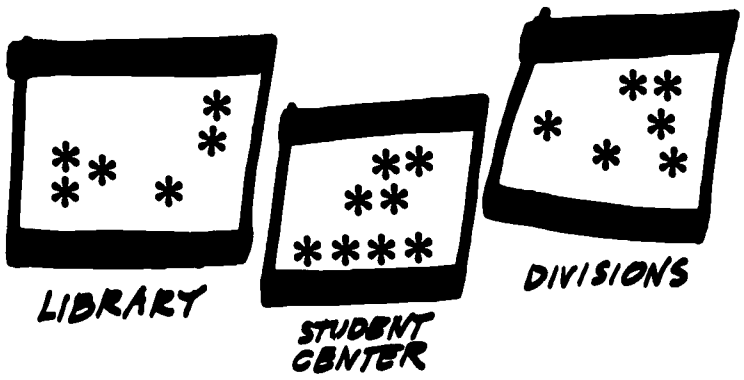
45



by DIVISIONS



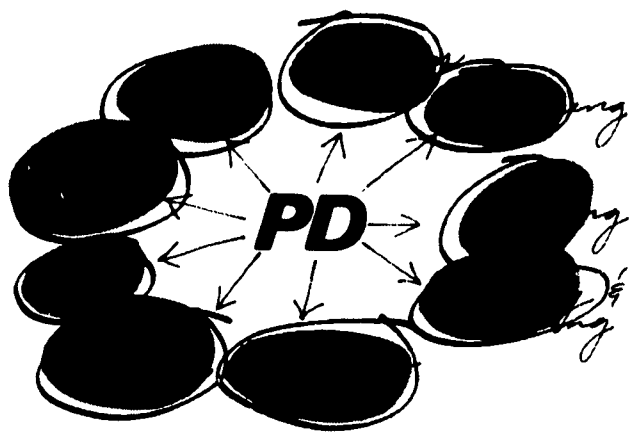
by FUNCTION



46

The HOME-BASE* is an essential to the commuting student. It could be a carrel, a live-in locker, or simply an area of space to satisfy a basic need of TERRITORIAL MAN.

Why can't PHYSICAL EDUCATION be PHYSICAL DEVELOPMENT?



47

Make P.D. a come-and-go affair - 15 to 20 minute workouts.

48

The Community College is a COMPREHENSIVE COLLEGE Vocational-technical students must be recognized as highly important members of the College faculty. Shops and technical labs should not be "placed in isolation" marking the vocational student with stigma.

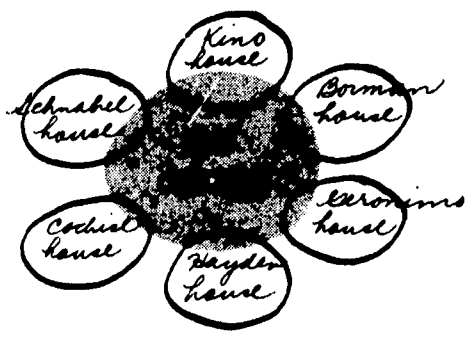
PC/JC is committed to these 3 PREMISES:

- That there should be the opportunity of MIXING STUDENTS regardless of ethnic/economic and academic background.

49

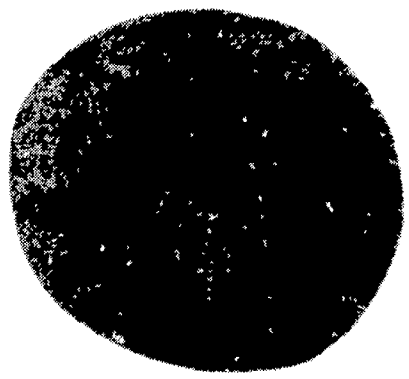
- That students should be encouraged through educational policy and architectural plan to MIX with PROFESSORS on an informal basis.

- That the DIVISIONS be MIXED architecturally to further encourage a social mix among both students and faculty toward perfecting the interdisciplinary concept.



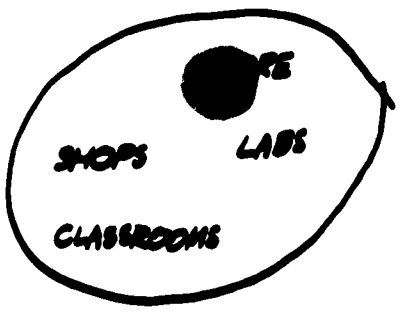
50

Architectural translation of the 3 PREMISES provides six relatively small groups for the "grand mix". Every student is assigned to a HOUSE as his HOME BASE. So is every professor. Most divisions are represented in each House to give physical implementation of interdisciplinary approach to LEARNING.



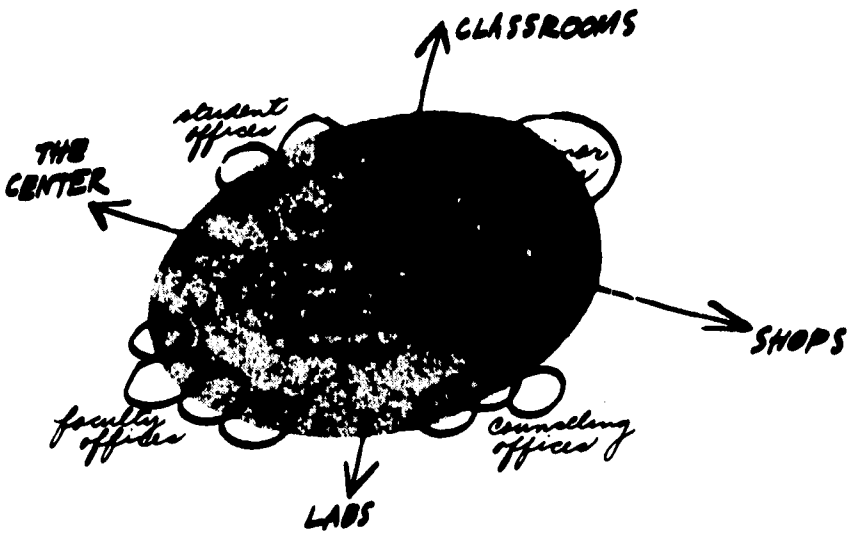
51

The CENTER, the C.B.D. of the Campus, is where all students of all houses come together in college-wide functions. It is the PUBLIC PLACE.



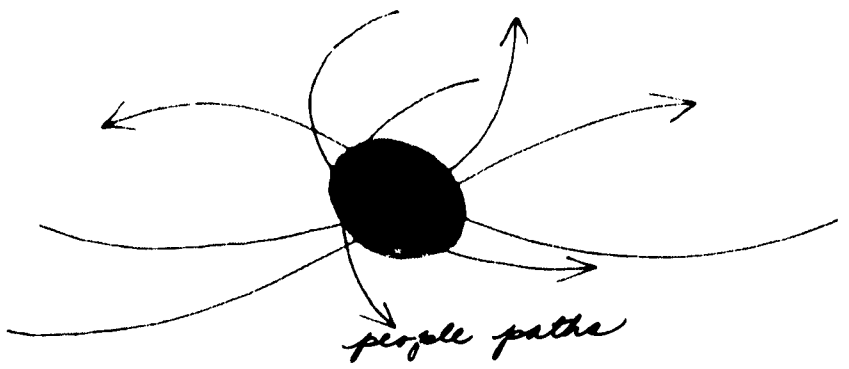
52

The HOUSE, designed to provide informal MIXING and INTERACTION of students and professors, is an architectural manifestation of the educational concept of INTEGRATED curriculum.



53

The CORE or "water hole", will create a sense of belonging to a group. It will be the PLACE so imperative for the commuting student.

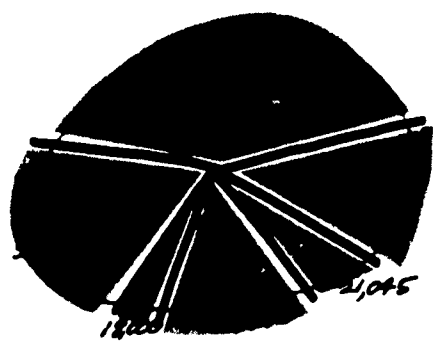


54

GUIDANCE is the keystone of the Community College structure. Location of counseling offices should be where the students are!

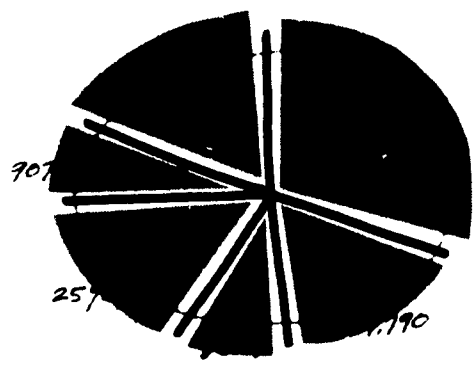
55

Each house is managed by a chief COUNSELOR.
His office will provide a secretarial pool
for the faculty of the various divisions.



56

The SIX DIVISIONS
A - Occupational Education, B - Life and Health Science
C - Business and Data Processing, D - Physical Science
and Math, E - Social Science, F - Humanities and
Fine Arts, have been allotted the areas shown above
for LEARNING SPACES for the final Phase.

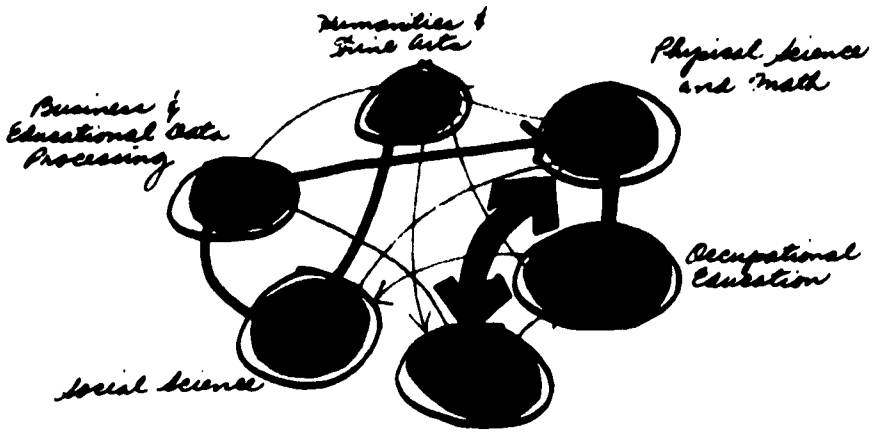


57

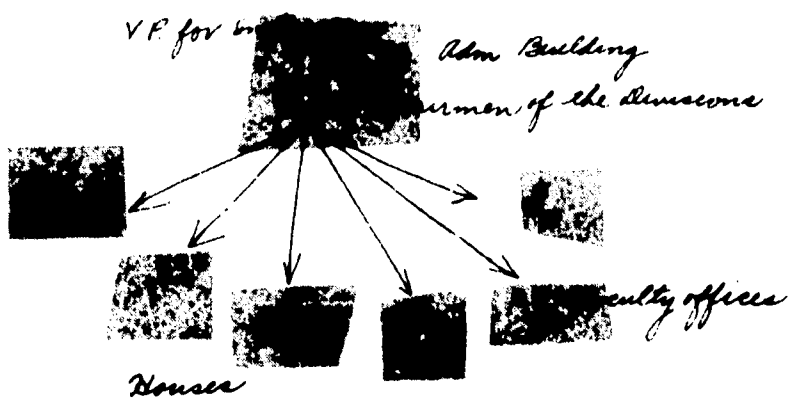
The LEARNING SPACES for the six divisions
in Phase I are as above.

KINO HOUSE [redacted]	BORMAN HOUSE [redacted]	GERONIMO HOUSE [redacted]	HAYDEN HOUSE [redacted]	COCHISE HOUSE [redacted]	SHNADEL HOUSE [redacted]
mixed classrooms	mixed classrooms	mixed classrooms	mixed classrooms	mixed classrooms	mixed classrooms
Business & E.D.P. All Sciences	Aeronautics Agr. Medical Music Home Eco	Ag. & Ref. Bldg. Trades Sheet Metal Multi-purp. lab	Applied & Fine Arts Physics Electronics Optics	Life Sc. Health Sc. Earth Sc. Chemistry	Welding Mach. Shop Drafting Surveying

The HOUSE PLAN calls for decentralization of the facilities of each DIVISION among the six houses.

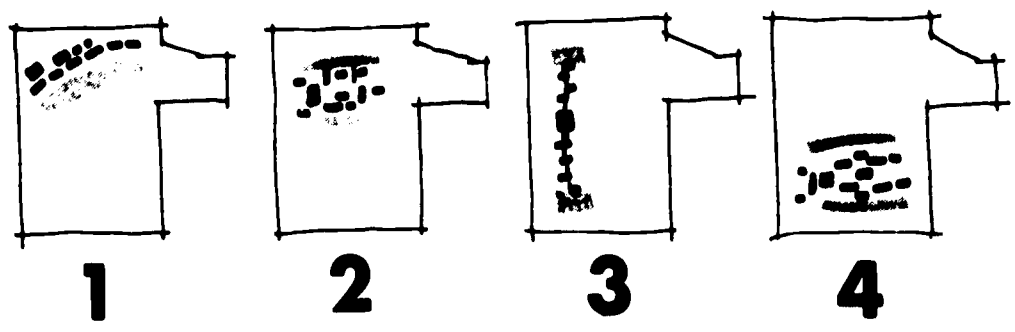


consideration of major and minor AFFINITIES of the Divisions offers clues as to locations and arrangement of buildings.



CHAIRMEN of the Divisions will be located in the Administration Building near the V.P. for Instruction to facilitate the interdisciplinary approach at the high level.

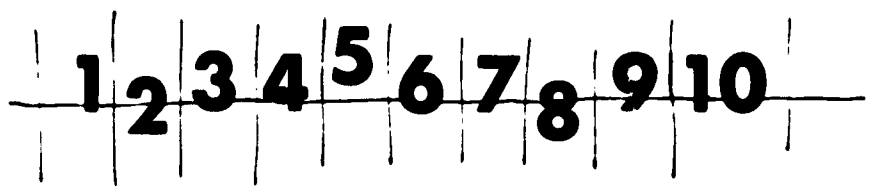
61



Four basic plans and locations were studied, analyzed and evaluated. Scheme 4 proved to have the best potentials.

62

The CAMPUS DEVELOPMENT PLAN, consisting of TEN PRECEPTS, is a FRAMEWORK on which to build. It should be rigid to obtain order, but flexible enough to permit physical and educational changes.



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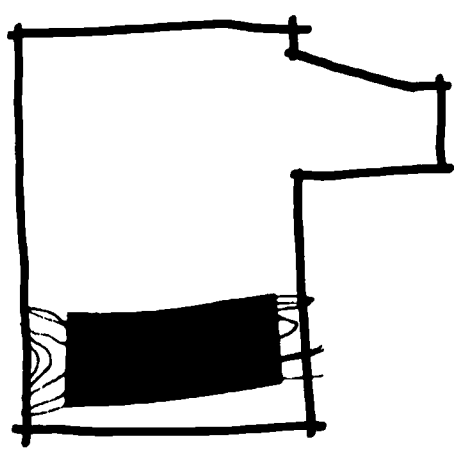
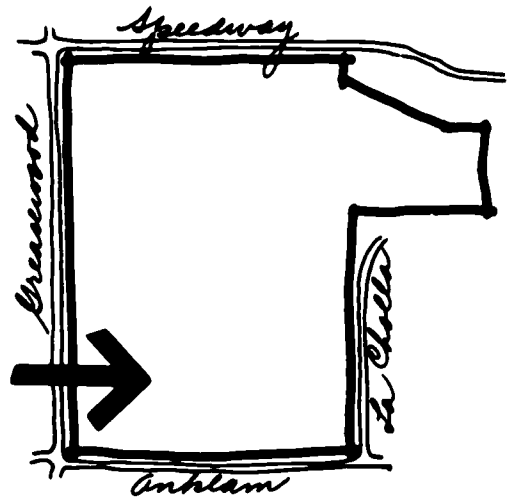
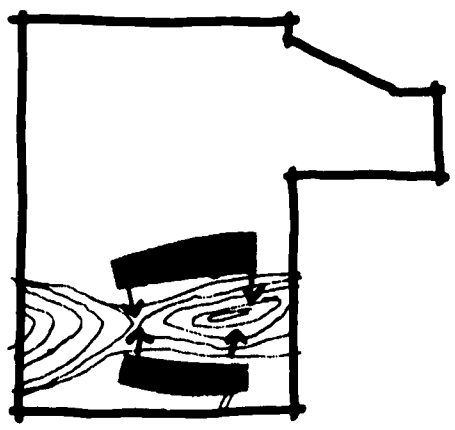


PRECEPT 1 of the Campus plan requires the buildings to be constructed on the dominating SOUTH RIDGE.



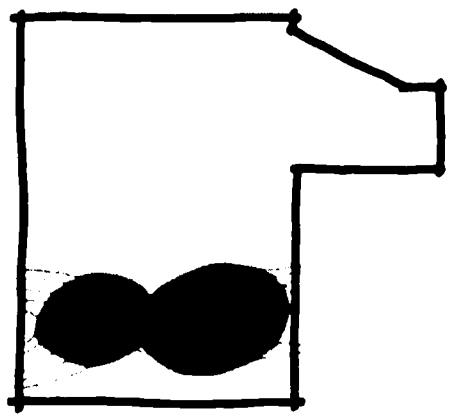
64

PRECEPT 2 designates the location of the main AUTO ENTRANCE



65

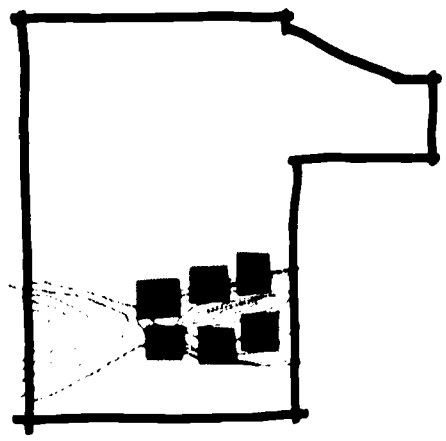
PRECEPT 3 specifies the PARKING should be in the arroyos on both sides of the south ridge.



66

PRECEPT 4 states there will be TWO BUILDING ZONES: one for ACADEMIC facilities and the other for a C.B.D. (Central business district)

67



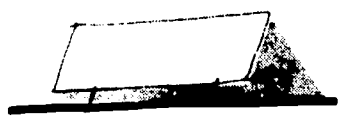
PRECEPT 5 translates the educational "grand mix" into architectural reality by requiring six separate HOUSES within the academic zone.

68

PRECEPT 6 requires that the TWO-WAY VIEWS should be honored.

PRECEPT 7 states that SHADE is an imperative.

69

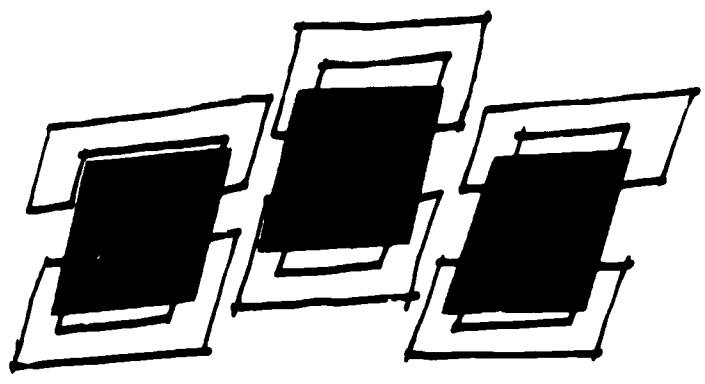


Under raised building and cross-over structures over mall

Under covered walks, terraces and decks.

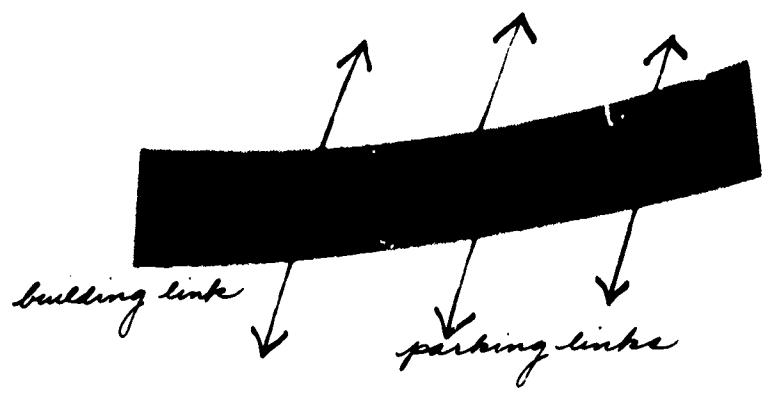
Within the shadows of walls and overhangs.

Within passage-ways of hillside structures.



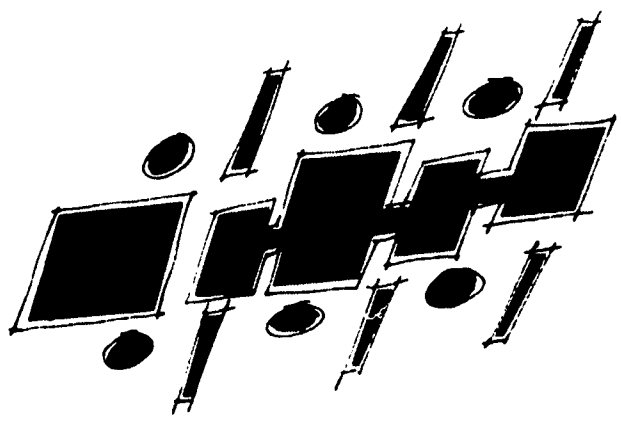
70

PRECEPT 8 recognizes the desert as a design asset and provides OASIS-LIKE building grouping.



71

PRECEPT 9 provides for two basic kinds of CORRIDORS.



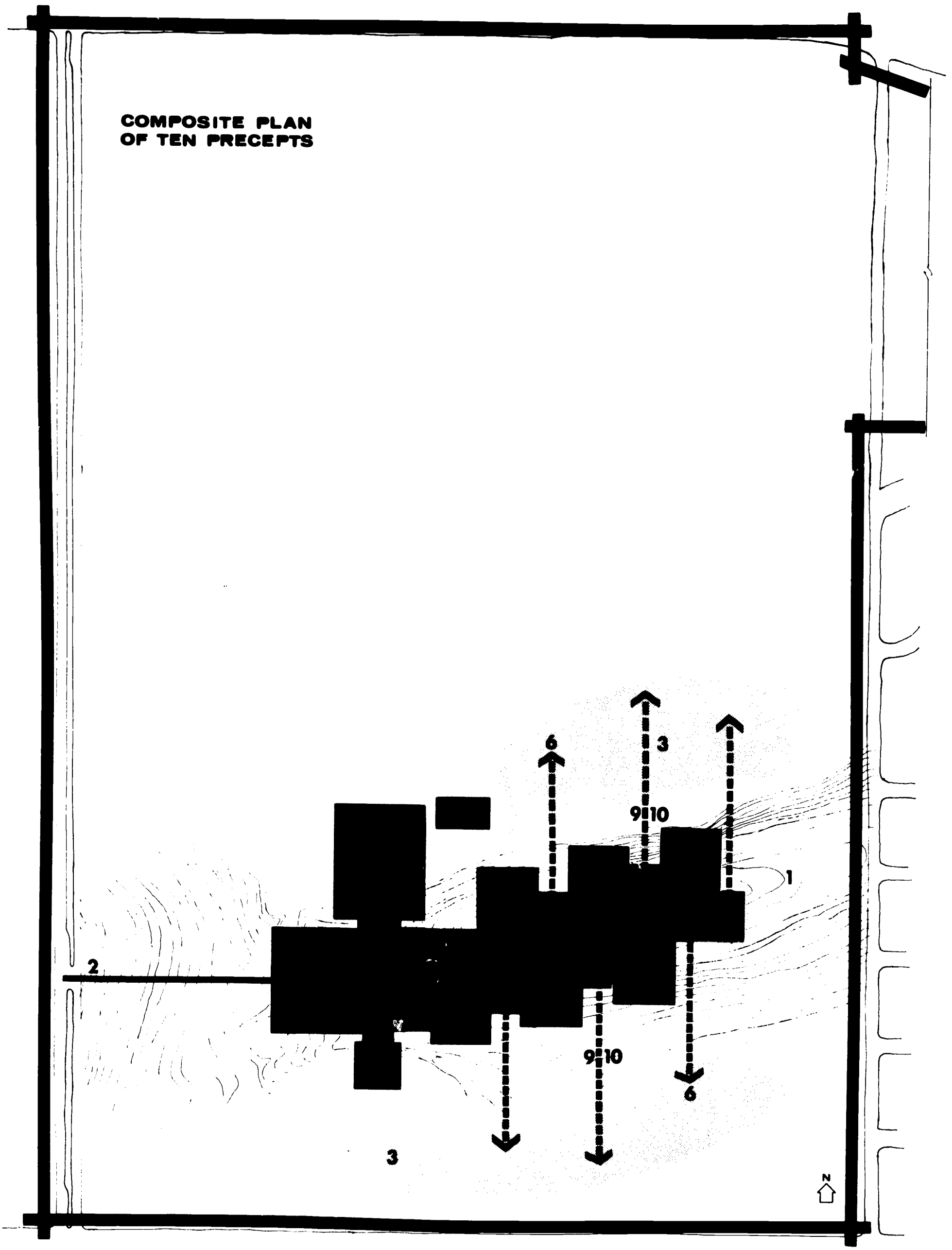
72

1. CBD / 2. academic mall / 3. Link / 4. Patio

PRECEPT 10 specifies four kinds of architecturally defined outside SPACES.

These graphics will be referred to by corresponding marginal numbers throughout the text.

COMPOSITE PLAN OF TEN PRECEPTS



PHILOSOPHY

The junior college is not a junior of anything. It is unique. It belongs to a specific district and does specific educational tasks that can be done best on a local level. The uniqueness lies in being local. But it has uniqueness in the broad sense, too. First, it is a new kind of college -- the new energy of American education. It's not a blown-up high school, nor a watered-down university. It is a college for, of, and by the community and serves as a regenerative force to raise aspirations to build a better community. It's community all the way. Second, the junior college is committed to serve all adults, as well as those of college age, regardless of intellectual, ethnic, and economic background. No other educational institution has such a diversified student body. Third, the junior college is committed, as no other institution, to see that the vocational-technical students are not only adequately trained, but educated and recognized as first class citizens. And fourth, the junior college is a unique democratic device for higher education. It was born in the United States. As James M. Hughes so aptly stated it in CRS Investigation #14, "The community college is as American as apple pie. It came out of the Middle West at the turn of this century and is now affecting the lives of our people in every section of the country. More and more it is becoming one of the most important elements of our educational structure. This generation depends upon it as much as the last generation depended upon the high school. It can

mean some college education for almost everybody, not only for youngsters just out of high school. The community college belongs to everybody in the community."

We know the importance of planning PC/JC. We realize that, if properly programmed educationally, the new college can better the lives of nearly every family in Pima County.

PROGRAM

Numerically the education program is well defined. The college will open in 1970 with approximately 2,800 full time equivalent day students and 331,000 square feet of space. Thirteen years later, the enrollment will have increased to 6,000. The area needs in succeeding phases are as follows:

Phase	Year Occupied	Head Count	FTE Day and Night	FTE Day	Gross Area (SF)
1	1970	5,100	3,600	2,800	331,000
2	1972	6,500	4,500	3,500	470,000
3	1974	7,800	5,500	4,300	547,000
4	1980	9,400	6,600	5,100	790,000
5	1983	11,000	7,700	6,000	820,000

So our task is to design a campus plan which can achieve orderly, organic growth during a five-phase building program.

Organizationally, the program calls for these six academic divisions:

Physical Sciences and Mathematics
Life and Health Sciences
Social Sciences

Humanities
- Music
- Fine and Applied Arts
- English

Occupational Education
- Personal and Public Services
- Engineering and Technology

Business and Electronic Data Processing

The educational specifications also call for physical education and general student activities such as the College Union, Administration, Admissions and Registration, Counseling and Placement, Learning Resource Center, and Theater.

For allocation of the ultimate learning space for the six divisions,

56, 57 see 56.

On May 17, 1967, upon the recommendation by the Citizens' Planning and Development Committee for Pima County Junior College and the educational consultants, the Governing Board approved the following which defines the scope of the program:

1. General education to prepare students for intelligent living.

2. Occupational education programs of varying length to prepare students for useful and satisfying vocations not requiring a baccalaureate degree, with particular emphasis on community needs.

3. Two years lower division collegiate work to enable students to progress smoothly into upper division work at the universities.

4. Continuing education courses to satisfy the vocational and avocational aspirations of those young people and adults who usually attend evening classes.

5. Guidance and personal counseling services to assist students in making sound decisions concerning their academic work and future careers.

6. Community services related to identified needs including cultural, creative and general interest programs.

One of the most important educational decisions that has far-reaching architectural implications was made during the CRS Planning Squatters the first week in August, 1967. At that time, the Governing Board adopted the concept of the "grand mix" as a basis on which to design the campus plan. The members agreed 49 to commit PC/JC to these three premises:

1. That there should be the opportunity of mixing students regardless of ethnic, economic, and academic background.

2. That students should be encouraged through educational policy and architectural plan to mix with professors on an informal basis.

3. That the Divisions be mixed architecturally to further encourage a social mix among both students and faculty toward perfecting the interdisciplinary concept.

Once this was done, there began to emerge the concept of the House. In essence, what the Governing Board said was that social 50, 52, 53, 55, 58 mixing of students and professors was more important to the total development of the individual student than giving the chairman of each division the expedient convenience of having his professors and students around him. The plan now is to have each division chairman located near the Vice President for Instruction

to facilitate the interdisciplinary approach at the administrative level.

What started out to be a middle-of-the-road educational program -- all things to all people -- now is a bold, straightforward commitment to the total development of each individual student.

SITE The site, 273 acres of rolling desert, is located just west of the city limits of Tucson, in the foothills of the Tucson Mountains, between Anklam Road and West Speedway. A panorama of the Catalina Mountains and the entire valley including the central business district of Tucson is visible from almost all portions of the property. Large Saguaro cacti, Palo Verde trees and an abundance of other desert vegetation are plentiful on the site. Four natural arroyos run through the site from west to east, forming interesting undulations of the earth surface and creating contrasting vertical spatial effects. From the southwest tip to the northeast tip there is a drop of more than 100 feet. At this time the major traffic arteries serving the campus are West Speedway which borders the property on the north and Anklam Road on the south. The Pima County Planning Department has indicated that both Speedway and Anklam will be converted to four-lane controlled access thoroughfares with frontage roads on either side. Also,

Greasewood Road is planned for extensions to form the west boundary of the site. No commercial development is anticipated on any areas adjoining the site. Water, electricity, gas and sanitary sewers are available in the streets bordering the site.

Many studies were made before determining the exact location for the buildings. During the CRS Squatters, the planning team, after thoroughly investigating all factors, finally decided on four feasible locations. Much time was spent on each proposed site trying to envision what the campus would look like and how it would perform as an educational tool. Our designers carried all four proposals to stages that would allow a comparative analysis.

Briefly, the results were:

LOCATION 1 BUILDINGS GROUPED WITH CAMPUS AXIS EAST AND WEST ALONG THE NORTH RIDGE ADJACENT TO SPEEDWAY.

PRO: 1) good views to valley, 2) excellent Speedway vistas to location, 3) good view north, 4) one of the highest points.

CON: 1) difficult access from Speedway, 2) insufficient economical parking, 3) contours lack contrast and amenities, 4) Speedway blocks expansion.

LOCATION 2 BUILDINGS GROUPED WITH CAMPUS AXIS EAST AND WEST IN THE ARROYO BETWEEN THE NORTH RIDGE AND THE MIDDLE RIDGE.

PRO: 1) good views to valley, 2) good view from valley.

CON: 1) parking on high ridges, 2) entrance difficult, 3) no feeling of contrasting contours.

LOCATION 3 BUILDINGS GROUPED WITH AXIS NORTH AND SOUTH ALONG GREASEWOOD ROAD.

PRO: 1) excellent view to valley, 2) good entrance possibilities.

CON: 1) restricted functional grouping, 2) parking difficult, 3) contours incompatible with building drainage problem.

LOCATION 4 BUILDINGS GROUPED WITH AXIS EAST AND WEST ON THE SOUTH RIDGE.

PRO: 1) highest point, 2) most economical parking area, 3) best views to and from, 4) excellent drainage, 5) best entrance point, 6) parking at lowest area.

CON: 1) adjacent Houses on east blocks view, 2) walk-up from parking steep.

Location 4 was a unanimous choice. It possesses the amenities for a truly inspirational campus. It's relatively economical. The south ridge dominates the area. It is readily accessible. And it is big enough to expand both east and west. There is room to grow.

PLANNING PRECEPTS

The result of our work is a Campus Plan of Ten Precepts. A plan basically is a framework on which to build educational facilities when the need arises. There is a certain amount of ridigity needed in the framework to obtain order, continuity, and architectural unity. On the other hand, the campus plan should be flexible enough to permit change. When education changes -- and it always does -- there must be physical changes. Instead of the

kind of Master Plan which is prone to rigidify the architecture and nullify creative education, the planning team thought it would be better to base the campus plan on precepts rather than crystalized form. The following are these Planning Precepts:

PRECEPT 1

PUT THE BUILDINGS ON THE DOMINATING SOUTH RIDGE.

The decision to do this is a result of a considerable number of hours by various members of the planning team walking over the site and evaluating alternate locations. Although we could have put the buildings in at least three other good places, we selected the south ridge for these reasons: 1) excellent drainage; 2) near the best parking area; 3) best view to and from the city; 4) most economical for building, and 5) best entrance point.

The south ridge building site offers great opportunity for architects to design an inspirational college environment. The buildings will ride the highest of the three crests providing views over cars and beyond to the Tucson and Catalina Mountains. The south ridge, being the longest, offers great expansion possibilities.

PRECEPT 2

PUT THE MAIN AUTOMOBILE ENTRANCE ON GREASEWOOD.

The first studies by the planning team indicate that the majority of the traffic to the site flows from the east on Speedway. Talks with city and county officials and examination of proposals for roads and street development made it clear that in five to ten

years Anklam will carry as much and probably more traffic to the site. We also learned that there are plans to extend La Cholla to
12 the south and Greasewood both north and south. The main automobile entrance, therefore, should be on Greasewood with the specific location being closer to Anklam than Speedway.

PRECEPT 3 PLACE PARKING IN THE ARROYOS ON BOTH SIDES OF THE SOUTH RIDGE. Because of the slope of the land, although relatively gentle in some places, parking could be quite expensive. The planning team felt that the places requiring the least earth to be moved, and consequently the least expenditure, would be the arroyos where the rifle and pistol ranges are now located. In making this selection, we were aware that the 40-foot difference in elevation from the parking to the academic area is a bit of a functional disadvantage. But there are aesthetic advantages. It is better to look down and over the parking area than to have the cars dominate the landscape. The people of Tucson would much prefer to see the buildings than look at their foothills draped in steel. The experience of walking from the car upward toward "higher education" might be quite pleasing.

PRECEPT 4 THERE WILL BE TWO BUILDINGS ZONES -- ACADEMIC AND
51 CBD. This provides a public place and a student place. There should be a contrast between these two zones. For example, the academic zone should be a quiet place, landscaped and informal

and rather intimate in character. The public place, which will be the "Central Business District" of the campus, should have a formal, grand scale with a lot of paved area for a lot of people. We believe that there can be a successful union of these opposites within an exciting and unique architectural expression.

SIX SEPARATE HOUSES WILL BE PROVIDED. Each House affords **PRECEPT 5**
the opportunity for students to mix with students regardless of ethnic, economic and academic background, and professors to mix with professors, regardless of their disciplines. This was a most **41,49,50,58**
difficult decision for the Governing Board to make. It means that the academic divisions will be decentralized. In other words, the Division of Social Science will not be a separate identity but will be dispersed physically within the Houses. It should be pointed out here, however, that although this decision tends to establish a definite pattern for grouping buildings, there still is a certain amount of flexibility. In later years, if the Governing Board decides to go a different route from this one of providing Houses of the Grand Mix, it is quite possible to convert each House into facilities for an academic division. Nevertheless, the concept of the House does have great architectural implications. It is possible and desirable for each House to have its own special features for creating self identity.

PRECEPT 6 THE TWO-WAY VIEWS SHOULD BE HONORED. It is a magnificent site. The buildings will be able to be seen from many places in the valley, particularly along the Tucson Freeway. The PC/JC will be seen as a new symbol. Building designers should honor the look-up views by carefully studying the masses and silhouettes. Even more important, most of the valley as well as beautiful views of the mountains can be seen from the building site, and these look-down vistas should be made a part of the architecture. This doesn't necessarily mean that every building should have picture windows looking down to the valley or up to the mountains. But it does mean that there should be some windows which focus on specific vistas. It also means that within the mall, patios or plazas, there should be "windows" which look out towards these views. These "windows" in the outside rooms might serve as access openings to the parking area and drainage for surface water.

PRECEPT 7 PLANNED SHADE IS AN IMPERATIVE. For thermal comfort the buildings and/or landscaping elements must provide shade. Architecturally, shade can occur: 1) under raised buildings, and under the crossover structure over the academic mall; 2) under overhangs, and 4) within passageways. In other words, there should be man-made umbrellas for much needed shade.

BUILDINGS SHOULD BE GROUPED IN OASIS-LIKE ARRANGEMENTS. The beautiful desert site must be respected. The less we do to it, the better the effect. The best way is simply not to spread the buildings all over the site. Keep grass, shrubs and trees to a minimum. Put the buildings in tight groups. Deliberately create a contrast between the expansive desert and the confining malls and patios. The campus should accentuate this contrast of the spatial experience -- the intimate space of a tight, academic village with the vast, impressive space of the desert.

PRECEPT 8

PROVIDE TWO BASIC KINDS OF CORRIDORS. There must be recognition of people movement. Two kinds of corridors are specified. The first concerns the corridor as a building link, which systematically ties together all of the major buildings. The walking plane of this corridor serves as a "carpet" for the outdoor spaces, defined by the building walls and masses. Below grade are the utility tunnels. The second type corridor serves as feed-in links between the parking areas and the building-link corridor or main concourse. This second type, the parking-link corridor, is transitional -- being both the oasis and of the desert. The parking-links also serve as "windows" for views from the outside rooms and as drainage outlets from the building areas situated on top of the ridge. These two basic corridors should be recognized

PRECEPT 9

for what they are -- efficient, interesting walking planes that should be preserved in every development study.

PRECEPT 10 FOUR KINDS OF ARCHITECTURALLY DEFINED OUTSIDE SPACES ARE PROVIDED. Skillfully designed outside spaces bring about visual continuity and unity more than the buildings themselves -- a principle of campus planning. We cannot overstress the importance of designing beautiful, inspirational, architecturally defined outside spaces. There should be four kinds of "outside rooms." The public outside room of the CBD is one. This is a people gathering place. It should take on an urban character in complete contrast to the desert, a place of much paving, with ample benches and a forum area where people can talk together in small groups. Here is a place for lots of shade, a place for the brightest area of night lighting, and a 24-hour-a-day, seven-day-a-week space. The second kind of space relates to the academic mall. It is primarily a space for movement -- not as much gathering or sitting as in the CBD. Certainly some of the desert plants should be recalled in this space because there will be fewer paved areas than in the CBD space. If we need one word to describe this space, the word would be integration. It must integrate the walks, the drainage elements, the utility systems. More important, this space integrates the individual buildings into a unified campus. The third space is the link space --

transitional space from buildings to desert. This could be one of the most exciting spaces on the campus because there is a 40-foot difference in elevation from the parking areas up to the main floor of the academic mall. The spatial experience of going up and going through passages to arrive at the outdoor rooms of the academic mall might well be a most satisfying aesthetic experience. The fourth space is the oasis-like space. It is a private space, belonging to one of the six Houses. It is a confining space. An intimate outside room -- the patio. This space should recall the amenities of southwestern architecture and help give an indigenous quality to the buildings.

FUTURE ACTION

These ten precepts are intended as general rules of action when the campus grows and develops. Alfred North Whitehead said there must be "change amid order." If followed, the precepts provide the order. But there must be change. Education has to have it. It has been our experience as campus planners that the "master plan" which is defined in terms of specific architectural form negates change, both architecturally and educationally.

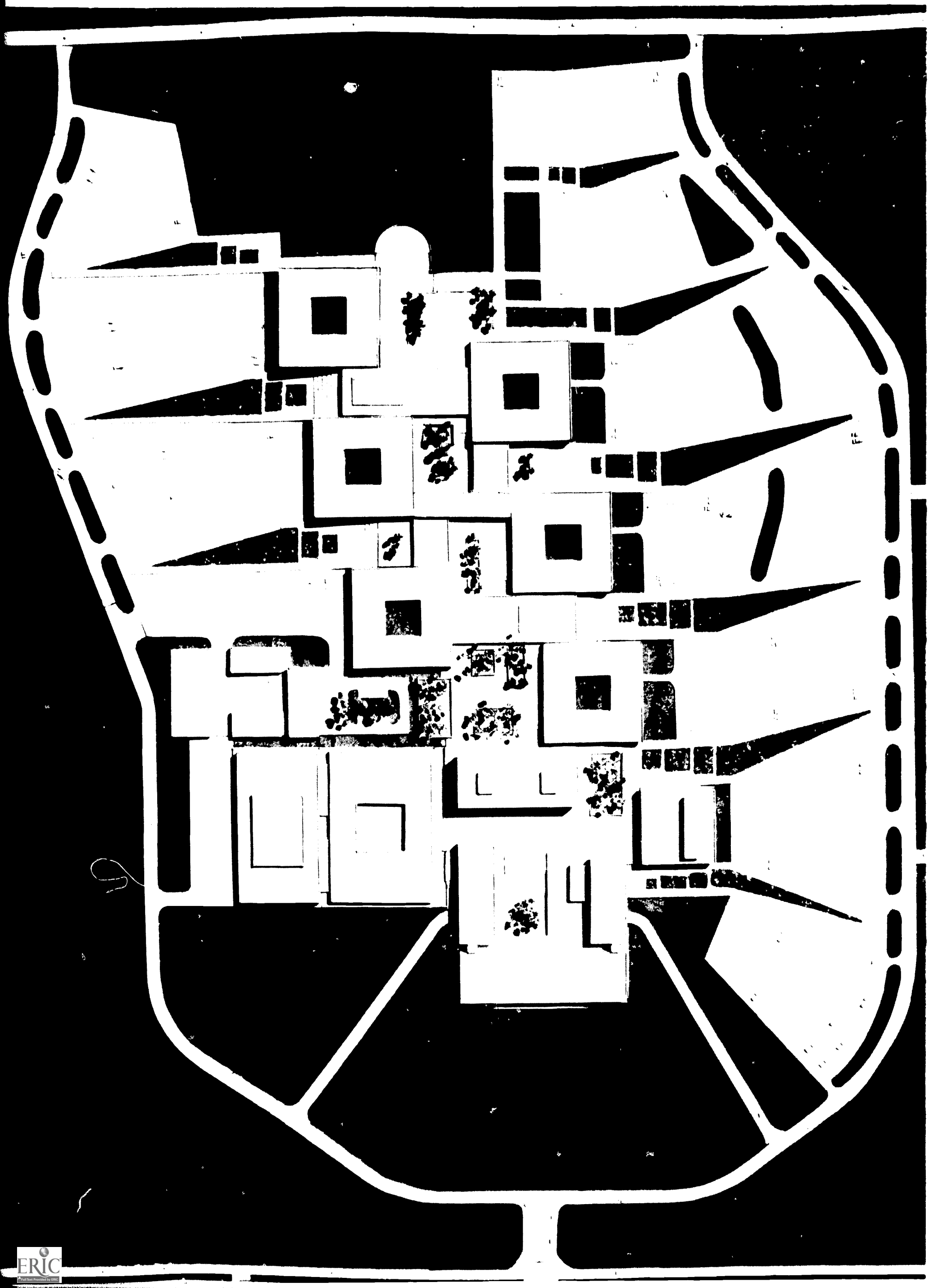
These ten precepts, therefore, are the campus plan. They will serve as bases of judgment for future Governing Boards to use in making decisions on expansion and conversion projects. They are guidelines to encourage creative architecture, not to standardize

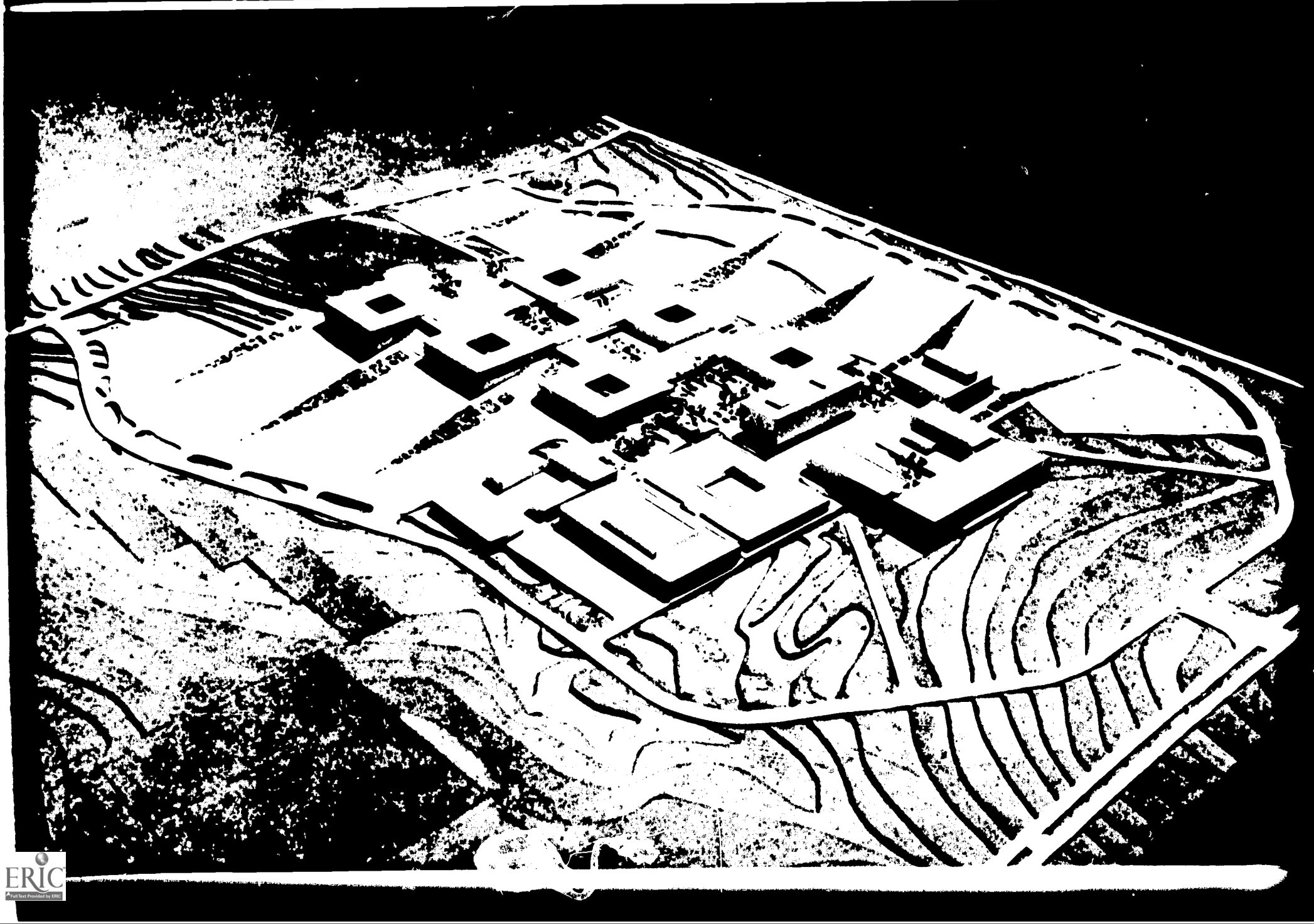
building forms. We think the Governing Board should hold the line with the precepts -- no change. But the Board should always remember that visual order is necessary, and recognize that the campus must change.

There follows a series of development studies based on the ten precepts campus plan. They show that there can be organic growth. Each phase of development holds a high quality of architectural unity. We like the studies very much. They have the growth advantage of a "linear plan," yet they retain some of the intimately defined outdoor spaces of the "cluster plan." But it should be pointed out emphatically that the precepts have a much higher hierarchy than these development studies. In fact, development studies should always be updated and even be ahead of current educational and architectural thought.

THE PRECEPTS ARE THE CRITERIA AGAINST WHICH THE GOVERNING BOARD JUDGES THE EFFECTIVENESS OF FUTURE DEVELOPMENT STUDIES AND PLANS FOR SPECIFIC BUILDING PROJECTS.

The following, therefore, are Development Studies, not inflexible plans. They are derived from THE CAMPUS PLAN OF TEN PRECEPTS, designed specifically for the Pima County Junior College.





DEVELOPMENT STUDY
PIMA COUNTY JUNIOR COLLEGE

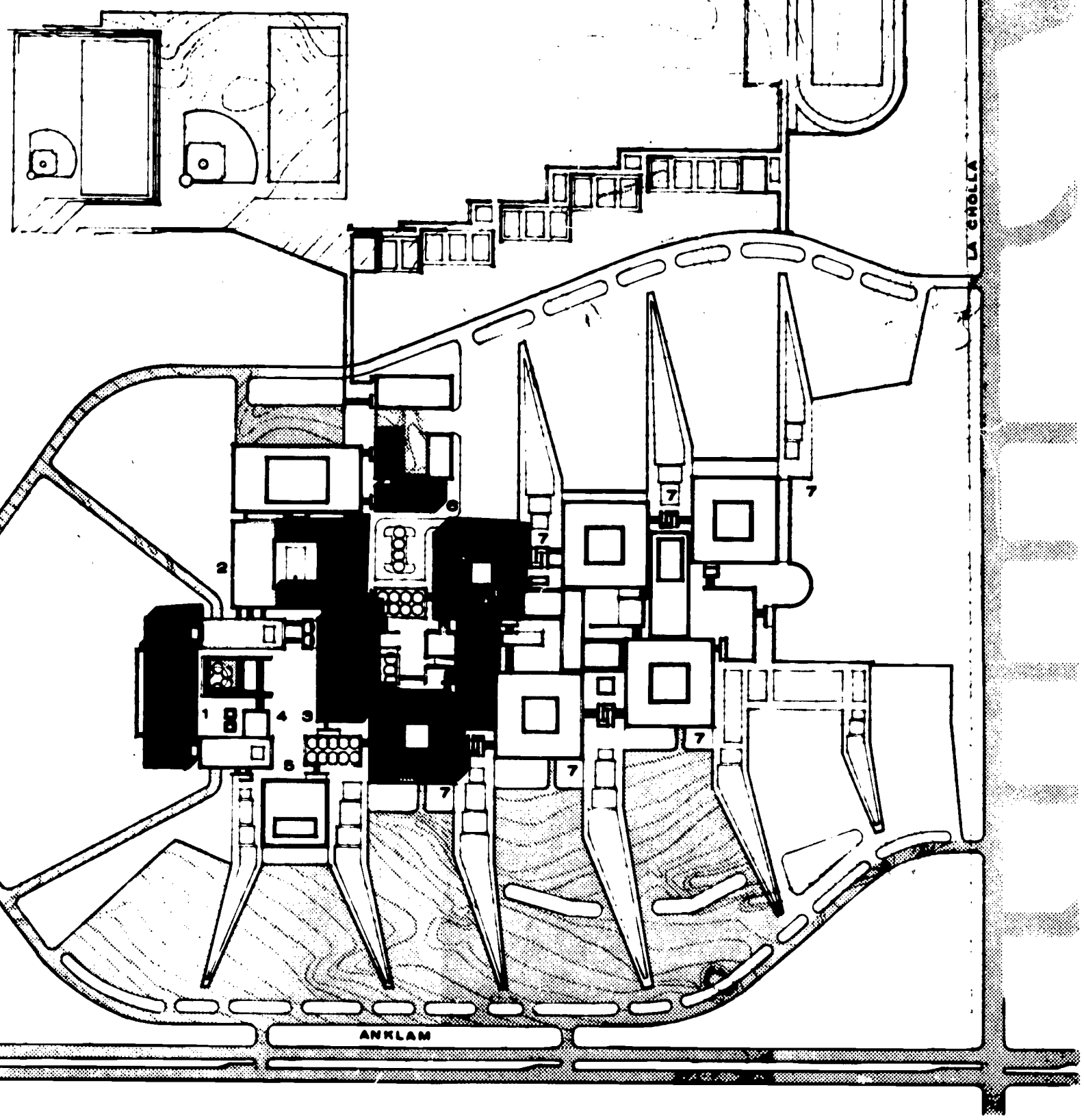
TUCSON, ARIZONA AUGUST 1967

CAUDILL ROWLETT SCOTT
Architects Planners Engineers

FRIEDMAN JOBUSCH WILDE
Associate Architects, Tucson

PHASE 1 F.T.E: 2800

1 Union	5 Administration
2 P.E.	6 Bldg. Services
3 Library	7 Academic House
4 Theatre	8 Lecture Hall



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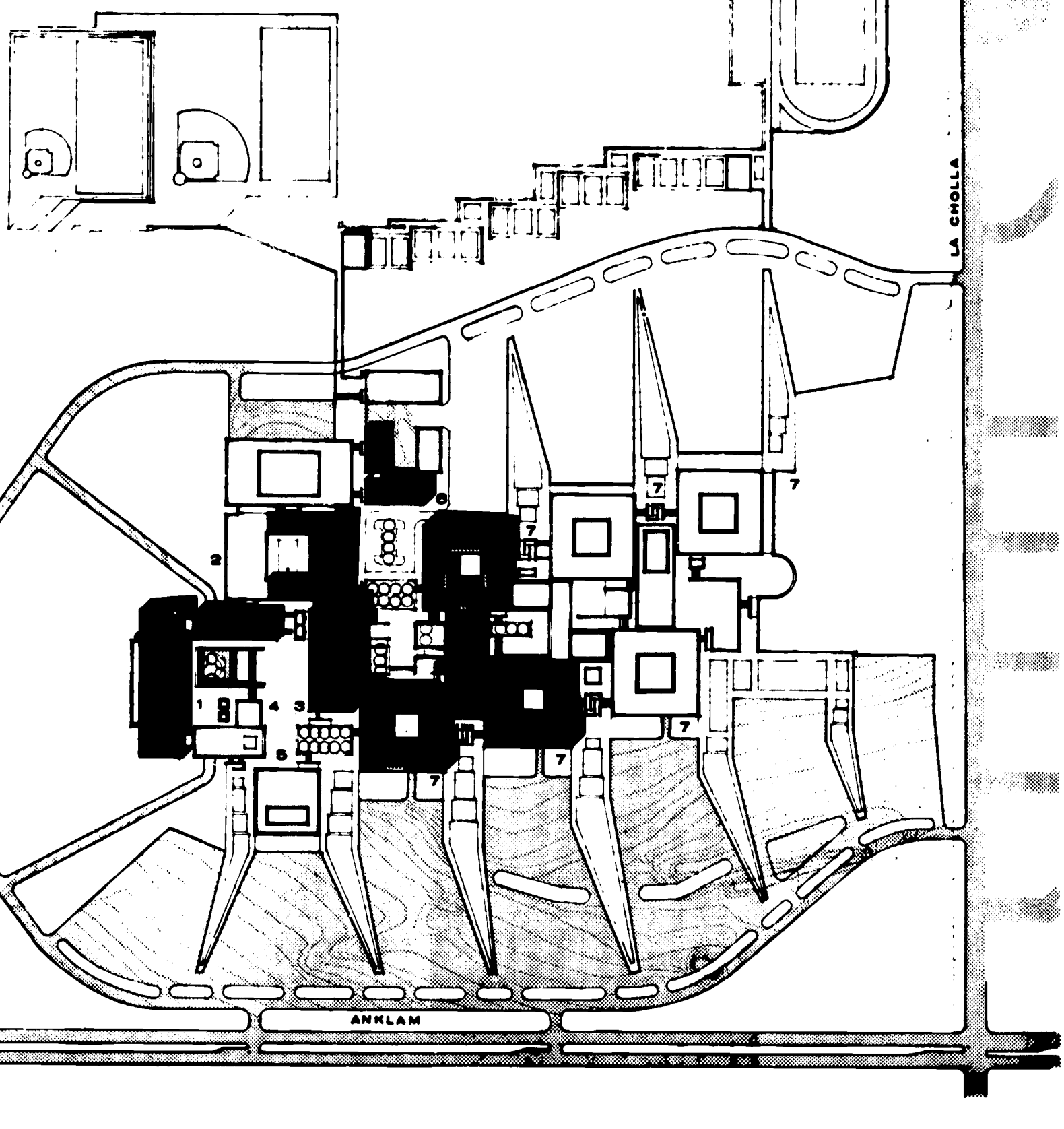
PHASE 2 F.T.E:3500

1 Union
2 P.E.
3 Library
4 Theatre
5 Administration
6 Bldg. Services
7 Academic House
8 Lecture Hall

0 50 100 200 300 N



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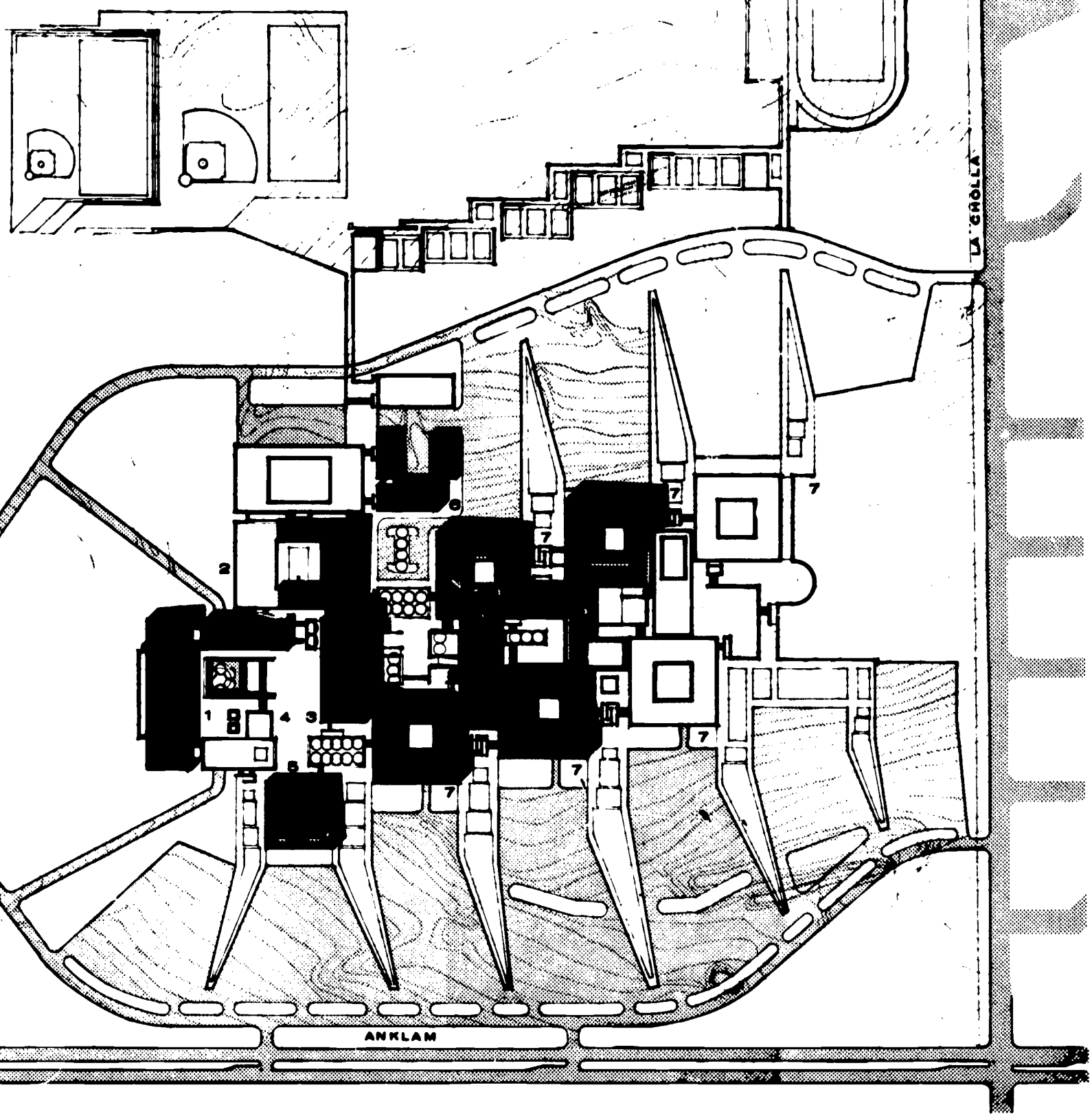
PHASE 3 F.T.E: 4300

1 Union
2 P.E.
3 Library
4 Theatre
5 Administration
6 Bldg. Services
7 Academic House
8 Lecture Hall

0 50 100 200 300

N



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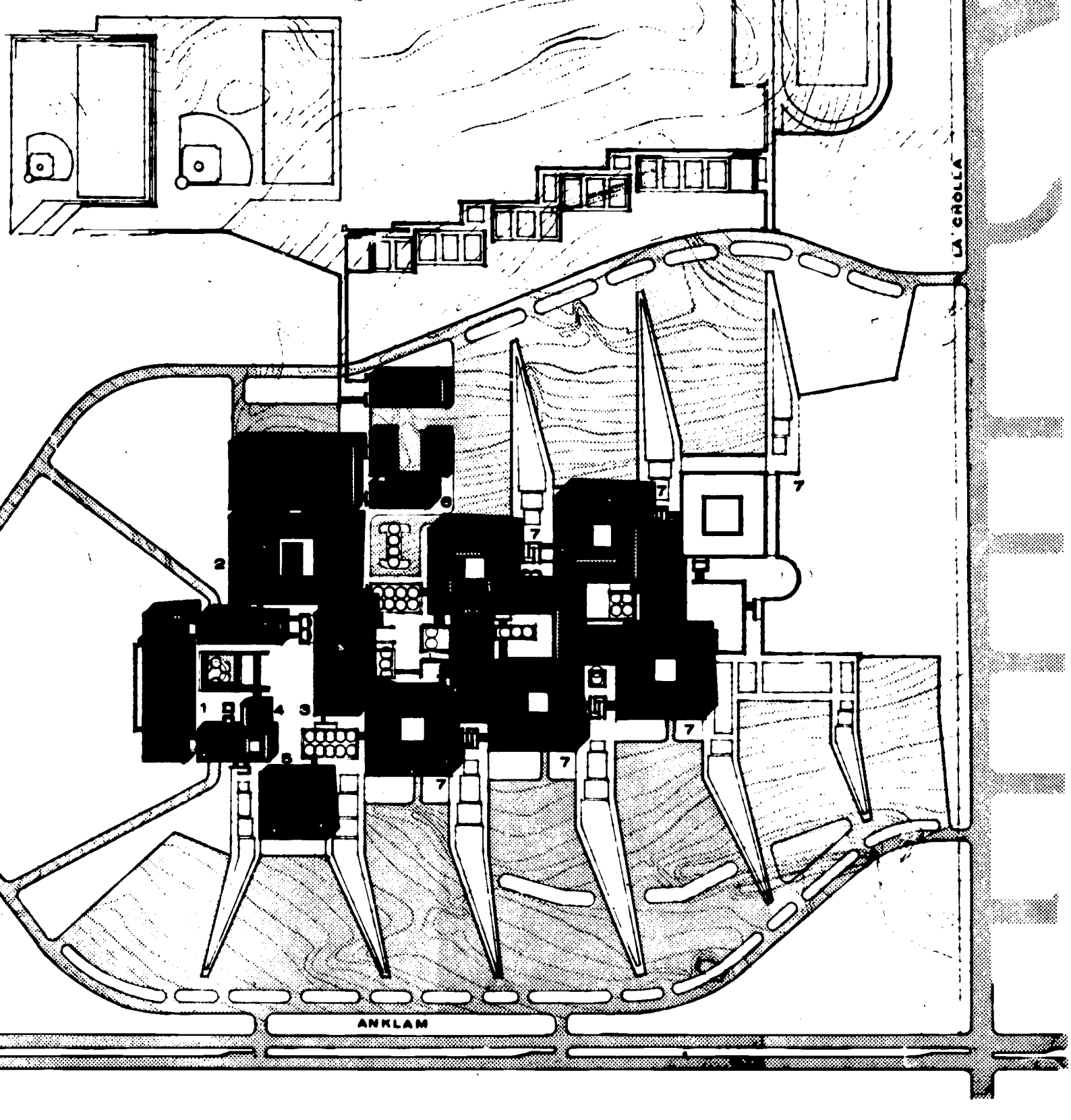
PHASE 4 F.T.E: 5100

1 Union
2 P.E.
3 Library
4 Theatre
5 Administration
6 Bldg. Services
7 Academic House
8 Lecture Hall

0 50 100 200 300

N



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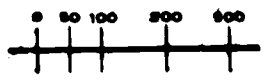
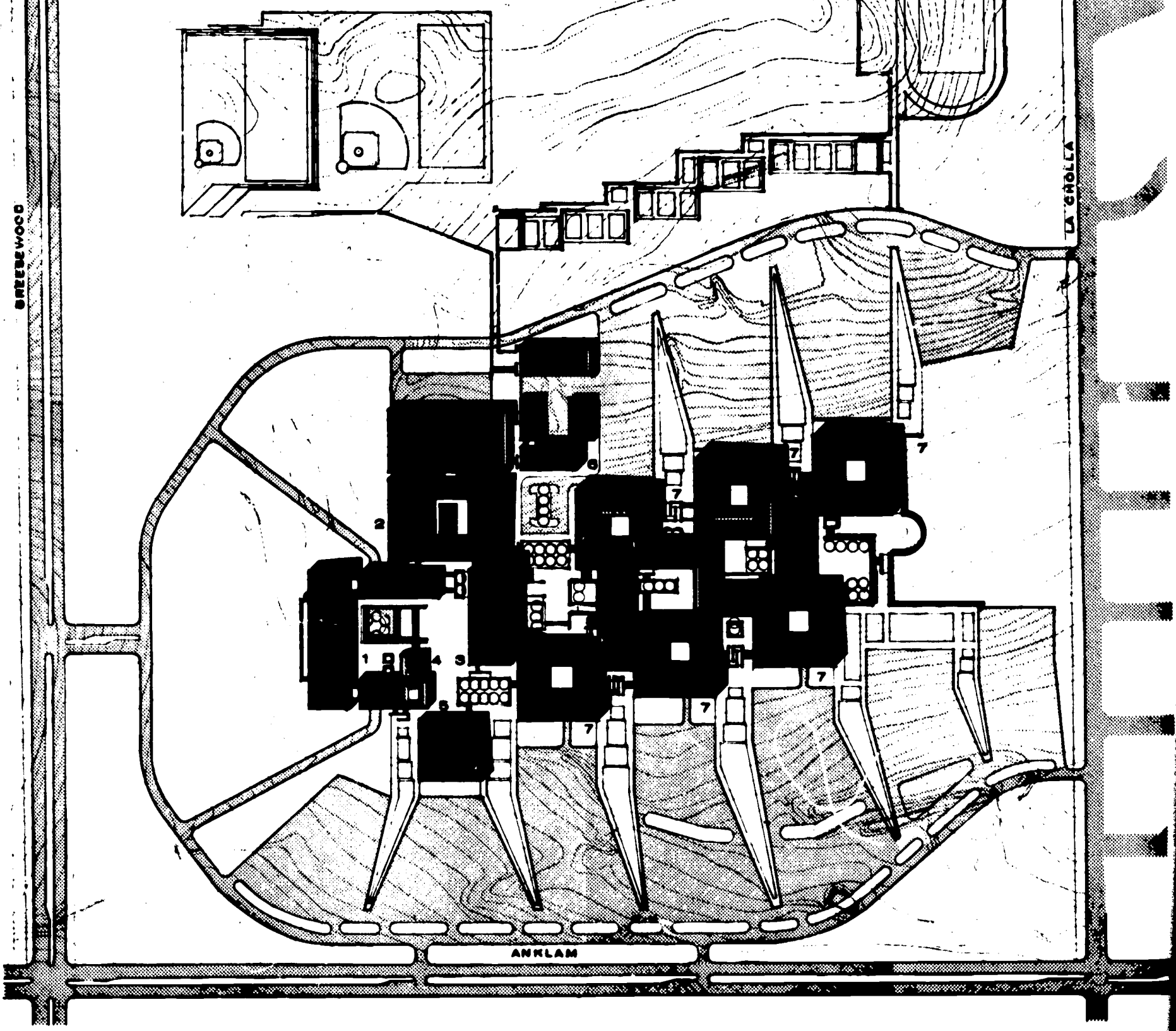
PHASE 5 F.T.E. 6000

1 Union	5 Administration
2 P.E.	6 Bldg. Services
3 Library	7 Academic House
4 Theatre	8 Lecture Hall





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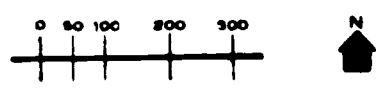
UTILITIES

1 Union
2 P.E.
3 Library
4 Theatre
5 Administration
6 Bldg. Services
7 Academic House
8 Lecture Hall



ACKNOWLEDGEMENTS

The development of the campus plan for the Pima County Junior College has been a team effort. Our role in the design of the campus plan has been but a part of the overall effort which includes educational programming, site selection, financial organization and many other tasks related to the establishment of a junior college.

We are grateful for the assistance, advice, and encouragement of the Arizona State Board of Directors for Junior Colleges, Pima County Junior College Governing Board, The Citizens' Committees for Pima County Junior College and the Officials of Pima County who so generously gave of their time to serve as members of the planning team.

We are especially indebted to Dr. John T. Condon, Mr. Jacob Fruchthendler and Dr. Thomas Lee for their guidance and encouragement throughout the planning process. We also wish to thank Mr. William Wilde and Mr. Dennis Brizee of William Wilde, AIA, and Mr. Bernard Friedman, Mr. Fred Jobusch and Mr. Earl K. Chann of Friedman and Jobusch, AIA, for their invaluable contributions throughout the design effort.

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The Caudill Rowlett Scott Team
Project Manager
Joseph W. Griffin

Caudill Design Group
William W. Caudill
Jack De Bartolo, Jr.
Eduardo Béjar, Graphics

Community College Consultant
James M. Hughes

Planning Consultant
Philip C. Williams

Editor
Julian Fisher

Associated Architects
Friedman and Jobusch, AIA
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